











AS Cumingham, CMMD,

LECTURES

ON THE

PHYSIOLOGICAL LAWS

OF

LIFE, HYGIENE,

AND

A GENERAL OUTLINE OF DISEASES PECULIAR TO FEMALES, EMBRACING A REVIEWAL OF THE RIGHTS AND WRONGS OF WOMEN, AND A TREATISE ON DISEASES IN GENERAL, WITH EXPLICIT DIRECTIONS HOW TO NURSE, NOURISH AND ADMINISTER REMEDIES TO THE SICK.

WITH SEVENTY-SEVEN ILLUSTRATIONS.

By H. S. CUNNINGHAM, C. M., M. D.,

MEMBER OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF THE PROVINCE OF QUEBEC, CANADA.

FIRST EDITION.



INDIANAPOLIS, INDIANA:
GEORGE F. BORST & CO., Publishers,
440 South Meridian Street.
1882.

WBA C973L 1882

Film NO. 2755, no. 1

Entered according to Act of Congress, in the year 1882, by
H. S. CUNNINGHAM, C. M., M. D.,
AND
GEORGE F. BORST,

In the Office of the Librarian of Congress, at Washington, D. C.

то

My Wife,

CARRIE FAIRFIELD CUNNINGHAM,

THIS VOLUME

IS

AFFECTIONATELY INSCRIBED.



TABLE OF CONTENTS.

PAGE.	PAGE.
Abdomen, Dropsy of404	Biliousness405
Abortion284	Bilious Fever345
Abscesses	Bilious Headache405
Absorbents145	Bladder, Congestion of317
Aching of the Muscles414	Bladder Diseases405
Acidity of the Stomach402	Bladder, Inflammat'n of.312, 409
Acne	Bladder, Stone in the407
Acute Diseases337	Blanc Mange424
Addison's Disease372	Bloodlessness
Ague341, 402	Blood, Circulation of130
Alcoholism 403	Blood, Poisoning of 371
Alimentary Canal167	Blues414
Amenorrhœa254, 403	Boils405
Anæmia	Bones, Diseases of405
Anchylosis381	Bowed Legs381
Angeioleucitis370	Bowed Legs, Appliance for381
Angina Pectoris403	Bowels, Inflammation of301
Angular Curvature378	Brain, Diseases of405
Animation, Suspended, at	Brain, Dropsy of322
Birth421	Brain, Inflammation of320
Ani, Prolapsus311	Brain, Softening of 322
Anthelminties404	Breast, Inflammation of 405
Anthrax375, 407	Breath, Foul406
Anti-emetie Remedies294, 421	Bright's Disease317, 406
Anus, Fissure of311	Bronchitis292, 406
Aphasia334	Bronchocele
Aphonia291	Bruises409
Aphthæ289, 404	Bubo406
Apoplexy326, 404	Burns406
Areolar Hyperplasia251	
Arrowroot Blanc Mange 424	Caleuli319, 407
Arterics, Plugging up of371	Cancer386, 407
Arthrites359	Canker407
Ascites404	Cankery Taste407
Asthma293, 404	Carbuncle375, 407
	Catalepsy 328
Barley Soup424	Catarrh176, 407
Barrenness404	Catarrh, Uterine 245, 249
Beef Essence423	Cerebro-Spinal Meningitis346
Beef Tea423	Chancre366, 408
Bed Sores 404	Change of Life408
Bee Stings405	Chaps408

PAGB.	PAGE
Chest, Pains in408	Displacements of the Womb.261
Chieken-pox360	Douehe, Universal185
Chicken Panada424	Dress of Children 124
Chilblains408	Drink in Fever423
Children, Health, Dress and	Dropsy 336, 410
Management of124	Dropsy of the Abdomen404
Chills and Fever341	Dropsy of the Brain322
Chills, Congestive345	Dypsomania403
Cholera355, 408	Dysentery313, 410
Cholera Infantum306	Dysmenorrhœa 257
Cholera Morbus305	Dyspepsia
Cholerie Diarrhea408	Dysuria324
Chlorosis256, 408	Dysuita,
Chorea330, 408	Ears142
Circulation of the Blood130	Ear Douehe, Sexton's143
Club Foot Appliance383	Ears, Diseases of410
Coeeyodynia269	Egg-nogg424
Colie305, 408	Egg Brandy424
Coma409	Elbow, Stiff381
Congestion of the Bladder317	Embolism371
Congestion of the Kidneys317	Endo-Metritis, Aente245
Congestive Chills345	Endo-Metritis, Cervieal246
Congestive Fever345	
Conjunctivitis of the Eyes409	Endo-Metritis, Corporeal250 Endo-Metritis, Chronie249
Constipation409	Encephalitis, Scrofulous321
Consumption, Tubercular188	Enlarged Glands411
Convulsions329, 409	Enteritis301
Coryza176, 409	Entries
Cough409	Epilepsy
Cough, Whooping337, 422	Eruptive Diseases of the
Coup-de-Soleil322	Vulva271
Croup299, 409	Erysipelas354, 411
Croup, Spasmodie413	Excessive Lactation413
Curvature, Angular378	Exostosis415
Curvature, Lateral379	Eyes137, 138, 139
Cystitis312, 409	Eyes, Conjunctivitis of409
0,5000,000,000	Lyes, Conjunctivitis of403
Dandruff410	Fainting411
Deafness410	Falling of the Rectum311
Debility410	Felon 377
Deformities, Instruments for 378	Female Form275
Delirium Tremens410	Female Pelvis231
Delivery, Prevention of280	Fever341, 411
Despondency410	Fever, Bilious345
Diabetes 309	Fever, Congestive345
Diarrhœa309, 410	Fever, Hay176, 409
Diarrhœa, Cholerie408	Fever, Intermittent341
Dietary423	Fever, Lung286, 417
Digestion145	Fever, Malarial341
Diphtheria	Fever, Pernicious345
Diseases of Women226	Fever, Puerperal218, 419
Dislocations	Fever Relansing

PAGE.	PAGE.
Fever, Remittent345	Home 83
Fever, Scarlet339, 419	Hydrocephalus322
Fever, Spotted346	Hydrophobia331
Fever Typhoid350	Hygiene 7
Fever, Typhoid 350 Fever, Typho-Malarial 361 Fever, Typhus 348 Fever, Yellow 362	Hygiene Montel 51
rever, Typno-Maiariai501	Hygiene, Mental 51
Fever, Typhus348	Hyperplasia, Areolar251
Fever, Yellow362	Hysteria332, 412
Fissure of the Anus311	
Fistula, Vesico-Vaginal269	Impaired Nutrition415
Fœtus	Impotency412
Flatulencc411	Incontinence of Urine320, 412
Flour Caudle425	Indigestion
Follieular Vulvitis272	Inflammation of the Brain320
	Inflammation of the Breast405
Foot, Club383	
Formulary391	Inflammation of the Bowels. 301
(F. 1)392	Inflammation of the Labia271
(F. 2) to (F. 4)	Inflammation of the Mouth. 289
(F. 5) to (F 7.)394	Inflammation of the Spinal
(F. 8) to (F. 14)395	Marrow322
(F. 15) to (F. 25)396	Inflammation of the Vulvo-
(F. 26) to (F. 36)397	vaginal Gland271
(F. 37) to (F. 44)398	Insomnia324
(F. 45) to (F. 52) 399	Intercostal Neuralgia301
(F. 53) to (F. 60) 400	Intermittent Fever341
(F. 61) to (F. 66)401	Irish Moss
Fractures	Irritation, Spinal322, 421
Practures	Lashania
O-tritia	Ischnria324
Gastritis297	Itch275, 413
General Diseases286	1711 0
Glands, Enlarged411	Kidneys, Congestion of317
Goitre Bronchocele373, 406	Knee, Stiff381
Gonorrhœa368	Knock-knee382
Gout359, 411	Knock-knee Appliance383
Gravel319	* *
Green Siekness256, 408	Labia, Inflammation of271
200, 200	Lactation, Excessive413
Hæmatocele of the Pudenda.270	Lacteals and Lymphatics 147
Hay Fever409	Laryngitis298
Headache412	
	Laryngismus Stridulus413
Headache, Bilious405	Lateral Curvature379
Headaehe, Siek	Lateral Curvature Brace379
Health of Children124	Laws of Life 7
Heart132	Legs, Bowed 381
Heart, Base of135	Leucocythæmia373
Heart Diseases218	Leucorrhea242
Hemorrhage, Any Kind.335, 412	Lice413
Hemorrhoids310, 416	Life, Change of408
Hernia390	Life, Laws of 7
Herpes412	Liver Complaint314
Hipjoint Disease379	Lockjaw31
Hipjoint Disease, Appliance 380	Loss of Voice291
Hoarseness 412	Lumbago 413

PAGE,	FAUE.
Lump on a Bone415	Oatmeal Pudding425
Lungs284	Obesity415
Lungs, Bronchial Tubes and	Obstetrics274
Blood Vessels of189	Onyxis376
Lung Fever286	Ophthalmia415
Lupus413	Orthopædic Surgery378
Lymphatic Temperament 56	Ovaritis268
	Ozæna 182, 415
Malaria413	
Malarial Fever341	Pacinian Corpuscles 17
Male Form275	Pains in Chest408
Management of Children 124	Parents, Advice to106
Mania, Acute413	Paronychia
Marrow, Inflammation of the	Paralysis327, 405
Spinal322	Pedicula413
Marrow, Softening of the	Pelvis, Female231
Spinal322	Peritonitis303, 416
Measles414	Pernicious Fever345
Melancholy	Perspiration416
Melasma Supra-Renalis372	Pertussis337, 422
Meningitis, Cerebro-Spinal346	Pharyngitis290
Meningitis, Tuberenlar321	Phrenology
Menorrhagia254	Phrenological Organs 64
Mental Hygiene	Phthisis Pulmonalis 188 Piles310, 416
Mental Temperament 55	Pityriasis
Metrorrhagia	Plenrisy288, 416
Micturition, Painful414	Plenritis288, 416
Milk Porridge424	Plenrodynia300, 416
Milk Punch	Pneumonia286, 417
Morbus Coxarius379	Poisoning of Blood371
Mother's Mark414	Poisoning Generally417
Motive Temperament 53	Poisoning by any of the Aeids 417
Mouth, Diseases of289, 414	Poisoning by Alcohol417
Muscles, Aching of414	Poisoning by Alkalies417
Mutton Broth424	Poisoning by Antimony417
Myelitis 322	Poisoning by Arsenic417
,	Poisoning by Belladonna418
Nævns414	Poisoning by Chloral418
Nail, Ingrowing376	Poisoning by Lead418
Neck, Wry380	Poisoning by Mercury418
Nerve, Pneumogastric160, 162	Poisoning by Nitrate of Sil-
Nephritis, Acute, Chronic317	ver418
Nenralgia333, 414	Poisoning by Opium or Morphine418
Neuralgia, Facial333	phine418
Neuralgia, Intermittent333	Poisoning by Oxalic Acid418
Neuralgia, Intercostal301	Poisoning by Phosphorus 418
Night Terrors325	Poisoning by Strychnia418
Nodns415	Polypus Preventing Delivery280
Nose, Diseases of415	Pott's Disease, Appliance378
Nutrition, Impaired415	Pox, Chicken360
Nymphomania415	Pox Small

PAGE.	PAGE.
Presentation, Ascertaining of .276	Sores, Bed404
Presentation, Face279	Soul, Science of 75
Dresontation Vertex 277	Sour Stomach402
Presentation, Vertex277	Spasmodic Croup413
Prolapsus Ani311	
Pruritus419	Spermatozoa242
Pruritus of the Vulva270	Spermatorrhea370, 420
Psoriasis419	Spinal Irritation322, 421
Pudenda, Hæmatocele of270	Spirometer, Tobold's285
Puerperal Fever281, 419	Spotted Fever346
Putrid Sore Throat338	Sprains421
Psychology 75	Sphygmograph, Pond's221
Pyæmia371	Sphygmograph Tracings.222, 223
1 y comments	St. Anthony's Dance330
Quinsy289	Stiff Knee or Elbow Appli-
Quinsy209	Still Kliee of Erbow Appli-
D 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ances,
Rachitis376	Stiff Knee or Elbow381
Ramollissement322	Stomach, Inflammation of 297
Rectum, Falling of311	Stomach, Sour402
Relapsing Fever363	Stomach, Ulcer of295
Remittent Fever345	Stomatitis289
Retention of Urine324	Stone in the Bladder 407
Rheumatism357, 419	St. Vitus' Dance330
Rice with Fruit425	Sunstroke322
Rickets 376	Sun Pain333
Ringworm421	Surgery, Orthopædie378
Rupture390	Summer Complaint306
tupture	Syphilis
Salivation419	Syringe, Fountain244
Scabies413	Syringe, Indispensable Cup243
Scarlatina339, 419	Syringe, Indispensable Cup. 245
Scarfatina	Syringe, Utero-Vaginal245
Searlet Fever339, 419	m 150 401
Sciatica420	Tapeworm172, 421
Scorbutis360	Teeth, Sound242
Scrofula376	Teeth, Syphilitie241, 366
Scrofulous, Encephalitis321	Temperaments 51
Seurvy420	Temperament, Lymphatic 56
Sea Siekness420	Temperament, Mental 55
Serpents, Bites of405	Temperament, Motive 53
Sexual Desire, Excessive420	Temperament, Vital 52
Ship Fever	Terrors, Night325
Sick Headache405, 420	Torticollis380
Sickness, Green256, 408	Tetanus331
Skeleton 5	Throat, Sore290
Skin 16	Throat, Putrid Sore338
Skin Diseases374	Thrombosis371
Sleeplessness324, 420	Thyroid Gland, Enlargement
	of 373
Small-Pox	Tinea Circinnatis421
Softening of the Brain322	Tinea Circinnatis421
Softening of the Spinal Mar-	Tie-Douloureux333
row322	Tonsillitis289
Somnambulism420	Trichinæ34
Sorge 120	Triemure 331

PAGE.	PAGE.
Tubercular Consumption 188	Vulva, Pruritus of270
Tubercular Meningitis321	Vulvo-Vaginal Gland, In-
Typhoid Fever350	flammation of271
Typho-Malarial Fever361	Vulvitis, Follicular272
Typhus Fever348	, , , , , , , , , , , , , , , , , , , ,
	Warts422
Ulcers386, 420	Water, Passing of, frequent414
Ulcers, Malignant413	Water, Passing of, painful414
Ulcer of the Stomach 295	Whites242
Ulceration of the Womb256	Whooping Cough337, 422
Urethritis, Specifie368	Wine, to Mull424
Urine, Incontinence of320, 412	Wine Whey 423
Urine, Passing of, Frequent. 309	Wolf, A413
414	Womb, Antiflexion260
Urine Passing of, Painful414	Womb, Antiversion263
Urine, Retention of324	Womb, Falling of262
Uterine Catarrh245, 249	Womb, Retroflection259
	Womb, Retroversion
Vagina239	Womb, Displacements of261
Varicella360	Womb, Ulceration of256
Variola337	Women266
Veins, Plugging up of371	Women and their Diseases 226
Vertex Presentation277	Worms404
Vesico-Vaginal Fistula269	Worm, Tape421
Vital Temperament 52	Wounds384
Voice, Loss of291	Wry Neck380
Vomiting294, 421	
Vulva, Eruptive Diseases of 271	Yellow Fever362

PREFACE.

In presenting a book to the public on Hygieue, and the symptoms and treatment of the various diseases with which the human family is frequently afflicted, I wish to impress it upon the minds of my readers that no one should presume to practice medicine who has not been properly educated in the profession of medicine, yet all who earefully read this work will be prepared for emergeneies, and be enabled to give timely aid, and often absolute relief, to the sufferer before a physician arrives. To those residing at a great distance from a physician this book will be invaluable, as it will teach how to relieve the siek, save time and trouble, and possibly the expense of a medical practitioner. Careful nursing, attention to Hygiene, and the observance of administering medicinal preparations and properly prepared nourishment, at regular intervals, are absolutely necessary to aid the sick to convalescence. Medieines are but aids to nature in overcoming disease, while hygienic care, such as sponging the body, ventilating the bed chamber, keeping the linen and bed clothing clean, and good food properly eooked, are all very essential and of the utmost importance.

The question may be asked, of what use or benefit is such a book to the public? I answer, its use is to teach its readers how to protect themselves against dangers, which most people are totally ignorant of, and the course to pursue to avoid disease, and when sick how to nurse and care for the afflicted, and thus aid nature and the physician to overcome the malady.

All physicians know how difficult it is to get remedies administered as directed, or hygienic advice and directions obeyed. It is my aim, in this volume, to teach the reader how to nurse and care for the sick and afflicted, and, also, the equally important duty of employing only competent and well qualified physicians, and of explicitly obeying their instructions and directions. I also hope to impart to my readers such information as will aid them in forming correct opinions touching disease in general, and thus

enable them to recognize the danger, and use remedies herein preseribed before it is too late. When the parties have but little faith in their physicians, this book will enable them to judge more accurately of the qualifications of those whom they employ, and do what is best under the circumstances. Many lives are lost annually through ignorance and neglect, of employing remedies suitable to to the disease, or ealling in a physician at the proper time; and I am sorry to say, too, often from not fully relying upon the physician, and following out his directions explicitly. Again, great injury is done by eramming the patient with all sorts of soealled remedies, suggested by neighbors, or ignorant and unqualified midwives. It frequently occurs that patients nearly die from injuries, convulsions, cholera morbus, cholera infantum, congestions, or spasms, before a physician can be summoned. By a thorough perusal of this work you will be prepared for all such emergeneies. Females frequently are taken suddenly and dangerously ill and die before the services of a physician or midwife ean be procured. This book will tell you what to do at such critical times, and save human suffering, and, perhaps, a human life. I propose to teach the young the proper way in which to grow up to maturity, and become healthy and useful men and women; to point out to them the shoals and quicksands upon which so many lives have been wrecked, and thereby pilot them safely through the voyage of life. These errors of youth have sent, and are sending thousands to premature graves, and are fast filling our idiotic and insane asylums to overflowing.

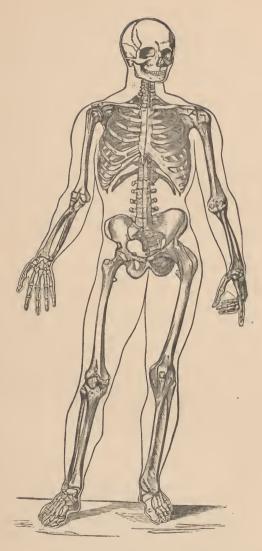
I hope to give such instructions to parents as will put them on the alert and prevent such diseases and disasters occurring to their children.

In conclusion, I hope to point out clearly and explicitly how man may be improved-mentally, morally and physically, and thereby make the world better, wiser and happier.

My thanks are due to my friend, M. W. Carr, for his eouneil and aid.

My thanks are especially due to Henry C. Lea's Son and Company, of Philadelphia, for granting me the privilege of using anatomical plates from their standard medical publication.

THE AUTHOR.



The skeleton, showing the ligaments on the left side and cut away on the right; also showing by the outline the cushion of muscle and fat. (HARTS-HORN.)



HYGIENE.

THE LAWS OF LIFE.

NATURE seems to be divided against herself, with respect to the health, happiness and life of man. Some of her forces tend to build up and sustain, while the office of others is to tear down and disintegrate. There are happy adaptabilities in our physical organization, which resolve themselves into capacities for resisting disease, expelling its seeds, and repelling the insidious advances of old age; but on the other hand, the air we breathe, the food we eat, and the liquids we imbibe are all laden with the germs of dissolution. Every motion in or of the body, whether voluntary or involuntary, is a step that shortens our journey to the grave. We live in the midst of carnage, erash, and din, while the powers of life and of death unceasingly contend for the mastery in our regard—health against siekness, pleasure against pain—the conflict wages just as between light and darkness on the hillsides, ere the gray of early morn "streaks the east," or "joeund day stands tip-toe on the misty mountain tops." From the time that Adam and Eve were expelled from the Garden of Eden to the present, unfortunate conditions, resulting in siekness, pain and early death, have been the sad

lot of man. In every age there have been witnesses to these things-men standing upon eminences noting with critical, yet swimming eyes, the thousands upon thousands of humanity periodically stretched upon the rack of sickness, or prematurely swallowed up in the great ocean of death. These witnesses are the physieians, who, through the desire for knowledge, ask, must these things ever continue to thus occur? who. through sympathy, are stretching out their hands to support the sinking ones; who, through a desire to do good to their fellows, look out upon the fair face of nature and up to nature's God, asking, Is there not balm for the wounded and health for the sick? All nature, and even the heavens, respond int he affirmative;—hence, certain men in every age, and particularly in this, our day and generation, filled with the truth of this assurance, have set themselves apart to study the nature of disease and the efficaev of remedies by the application of which the sufferer may be relieved from pain, and friendly nature aided in her efforts to overcome our numerous ills. Many who have no conception of the magnitude of the undertaking are inclined to look upon the study of medicine as a humbug, and to consider the science of medicine a mere matter of eonjecture. This is a great error. When your physician is summoned to give relief to a darling child, attacked with convulsions, and in agony and contortions distressing and frightful to behold, he at once administers a little medicine hypodermically (the patient being unable to swallow), and in from five to ten minutes the pain and convulsions cease and the little sufferer is gently lulled into summer-evening quiet and balmy sleep. Let the incredulous scoffer now gaze on the scene, changed as it is for the better.

while the gladdened hearts of the household, through swimming eyes and with quivering lips, seek to express their gratefulness to God, and perchance to the doctor as he takes his leave. Or it may be that a beloved wife or husband is attacked in the night with a severe pain in the side or breast, attended with a cough —yes in the night! when the darkness is unusually black; when solemn silence like an incubus has settled down upon all around; and when loneliness, the harbinger of helplessness, is present and adds additional weight to the sorrow of your home. You summon your physician at once. After a careful examination he pronounces the affliction a case of pneumonia or pleuritis; tells you how to nurse and care for the patient, and your loved one, whose suffering gives you so much anxiety and sorrow, is soon able to take rest and advance in the way of recovery through the soothing influence of remedies properly administered. Or, forsooth, a limb is fractured, and it is set and bandaged in a skillful manner, and deformities are thereby avoided, or perhaps death through mortification is averted by amputation; in any ease you can easily realize that there is some good in surgical skill, and that there is virtue in medicines prescribed by a good physician and carefully administered according to his directions. None save those who have suffered much pain can estimate what a great blessing it is to have the kind, encouraging look of an able physician, coupled with his skill, as he sits by your side in sickness and first learns your symptoms, and studies the proximate cause of your malady, and then administers agents to relieve and heal you, speaking words of cheer and full of hope the while. The sacrifices of good physicians are many, and their labors arduous, which the poetOliver Wendell Holmes.

has so grandly portrayed in a poem, read by him June 8, 1881, at the centennial meeting of the Massachusetts Medical Society:

Three paths there be where Learning's favored sons, Trained in the schools which hold her favored ones, Follow their several stars with separate aim; Each has its honors, each its special claim. Bred in the fruitful cradle of the East, First, as of oldest lineage, comes the Priest; The Lawyer next, in wordy conflict strong, Fnll armed to battle for the right,—or wrong; Last, he whose calling finds its voice in deeds, Frail Nature's helper in her sharpest needs.

Each has his gifts, his losses and his gains, Each his own share of pleasures and of pains; No life-long aim with steadfast eye pursued Finds a smooth pathway all with roses strewed; Tronble belongs to man of woman born,— Tread where he may, his foot will find its thorn.

Of all the guests at life's perennial feast,
Who of her children sits above the Priest?
For him the broidered robe, the earven seat,
Pride at his beck, and beauty at his feet,
For him the incense fumes, the wine is poured,
Himself a God, adoring and adored!
His the first welcome when our hearts rejoice,
His in our dying ear the latest voice,
Font, altar, grave, his steps on all attend,
Our staff, our stay, our all but Heavenly friend!

Where is the meddling hand that dares to probe The secret grief beneath his sable robe? How grave his port! how every gesture tells Here trnth abides, here peace forever dwells; Vex not his lofty soul with comments vain; Faith asks no questions; silence, ye profane!

Alas! too oft while all is calm without The stormy spirit wars with endless doubt; This is the mocking spectre, scarce concealed Behind tradition's bruised and battered shield. He sees the sleepless critic, age by age, Scrawl his new readings on the hallowed page, The wondrous deeds that priests and prophets saw Dissolved in legend, crystallized in law, And on the soil where saints and martyrs trod Altars new builded to the Unknown God; His shrines imperilled, his evangels torn,— He dares not limp, but ah! how sharp his thorn!

Yet while God's herald questions as he reads. The outworn dogmas of his ancient creeds, Drops from his ritual the exploded verse, Blots from its page the Athanasian curse, Though by the critic's dangerons art perplexed, His holy life is Heaven's unquestioned text; That shining guidance doubt can never mar,—The pillar's fame, the light of Bethlehem's star!

Strong is the moral blister that will draw Laid on the conscience of the Man of Law Whom blindfold Justice lends her eyes to see Truth in the seale that holds his promised fee. What! Has not every lie its truthful side, Its honest fraction, not to be denied? Per contra—ask the moralist.—in sooth Has not a lie its share in every trnth? Then what forbids an honest man to try To find the truth that lurks in every lie, And just as fairly eall on truth to yield The lying fraction in its breast concealed? So the worst rogue shall claim a ready friend His modest virtues boldly to defend, And he who shows the record of a saint See himself blacker than the devil could paint.

What struggles to his eaptive soul belong
Who loves the right, yet combats for the wrong,
Who fights the battle he would fain refuse
And wins, well knowing that he ought to lose,
Who speaks with glowing lips and look sincere
In spangled words that make the worse appear
The better reason; who, behind his mask
Hides his true self and blushes at his task,—
What quips, what quillets cheat the inward seorn
That mocks such triumph? Has he not his thorn?

Yet stay thy judgment; were thy life the prize,
Thy death the forfeit, would thy cynic eyes
See fault in him who bravely dares defend
The cause forlorn, the wretch without a friend?
Nay, though the rightful side is wisdom's choice,
Wrong has its rights and claims a champion's voice;
Let the strong arm be lifted for the weak,
For the dumb lips the fluent pleader speak;—
When with warm "rebel" blood our street was dyed
Who took, unawed, the hated hirelings' side?
No greener civic wreath can Adams claim,
No brighter page the youthful Quiney's name?

How blest is he who knows no meaner strife
Than Art's long battle with the foes of life!
No doubt assails him, doing still his best,
And trusting kindly Nature for the rest;
No mocking conscience tears the thin disguise
That wraps his breast, and tells him that he lies.
He comes; the languid sufferer lifts his head
And smiles a welcome from his weary bed;
He speaks; what music like the tones that tell
"Past is the hour of danger,—all is well!"
How can he feel the petty stings of grief
Whose cheering presence always brings relief?
What ugly dreams can trouble his repose
Who yields himself to soothe another's woes?

Hour after hour the busy day has found The good physician on his lonely round; Mansion and hovel, low and lofty door, He knows, his journeys every path explore,—Where the cold blast has struck with deadly chill The sturdy dweller on the storm-swept hill, Where by the stagnant marsh the sickening gale Has blanched the poisoned tenants of the vale, Where crushed and maimed the bleeding victim lies, Where madness raves, where melancholy sighs, And where the solemn whisper tells too plain That all his science, all his art, were vain.

How sweet his fireside when the day is done And cares have vanished with the setting sun! Evening at last its hour of respite brings And on his eough his weary length he flings. Soft be thy pillow, servant of mankind, Lulled by an opiate Art could never find; Sweet be thy slumber,—thou has earned it well,— Pleasant thy dreams! Clang! goes the midnight bell!

Darkness and storm! the home is far away
That waits his coming ere the break of day;
The snow-elad pines their wintry plumage toss,—
Doubtful the frozen stream his road must cross;
Deep lie the drifts, the slanted heaps have shut
The hardy woodman in his mountain hut,—
Why should thy softer frame the tempest brave?
Hast thou no life, no health, to lose or save?
Look! read the answer in his patient eyes,—
For him no other voice than suffering cries;
Deaf to the gale that all around him blows,
A feeble whisper calls him,—and he goes.

Or seek the crowded city,—summer's heat Glares burning, blinding, in the narrow street, Still, noisome, deadly, sleeps the envenomed air, Unstirred the yellow flag that says "Beware!" Tempt not thy fate,—one little moment's breath Bears on its viewless wing the seeds of death; Thou at whose door the gilded chariots stand, Whose dear-bought skill unclasps the miser's hand, Turn from thy fatal quest, nor east away That life so precious; let a meaner prey Feed the destroyer's hunger; live to bless Those happier homes that need thy care no less!

Smiling he listens; has he then a charm • Whose magic virtues peril can disarm?
No safeguard his; no amulet he wears,
Too well he knows that nature never spares
Her truest servant, powerless to defend
From her own weapons her unshrinking friend.
He dares the fate the bravest well might shun,
Nor asks reward save only Heaven's "Well done!"

Such are the toils, the perils that he knows, Days without rest and nights without repose, Yet all unheeded for the love he bears His art, his kind, whose every grief he shares.

Harder than these to know how small the part Nature's proud empire yields to striving Art;

How, as the tide that rolls around the sphere Laughs at the mounds that delving arms nprear,—Spares some few roods of oozy earth, but still Wastes and rebuilds the planet at its will, Comes at its ordered season, night or noon, Led by the silver magnet of the moon, So life's vast tide forever comes and goes, Unchecked, resistless, as it ebbs and flows.

Hardest of all, when Art has done her best,
To find the enckoo brooding in her nest;
The shrewd adventurer, fresh from parts unknown,
Kills off the patients Science thought her own,
Towns from a nostrum-vender get their name,
Fences and walls the cure-all drug proclaim,
Plasters and pads the willing world beguile,
Fair Lydia greets us with a stringent smile,
Munchausen's fellow-countryman unlocks
His new Pandora's globule-holding box,
And as King George inquired with puzzle grin
"How—how the devil get the apple in?"
So we ask how,—with wonder-opening eyes,—
Such pygmy pills can hold such giant lies!

Yes, sharp the trials, stern the daily tasks
That suffering Nature from her servant asks;
His the kind office dainty menials seorn,
His path how hard,—at every step a thorn!
What does his saddening, restless slavery buy,
What save a right to live, a chance to die,—
To live companion of disease and pain,
To die by poisoned shafts untimely slain?

Answer from hoary eld, majestic shades,—
From Memphian courts, from Delphie colonnades,
Speak in the tones that Persia's despot heard
When nations treasured every golden word
The wandering echoes wafted o'er the seas
From the far isle that held Hippocrates;
And thou, best gift that Pergamus could send
Imperial Rome, her noblest Cæsar's friend,
Master of masters, whose nnehallenged sway
Not bold Vesalius dared to disobey;
Ye who while prophets dreamed of dawning times
Taught your rude lessons in Salerno's rhymes,

And ye, the nearer sires, to whom we owe
The better share of all the best we know,
In every land an ever-growing train,
Since wakening Science broke her rusted chain,—
Speak from the past, and say what prize was sent
To erown the toiling years so freely spent!
List while they speak:

In life's uneven road Our willing hands have eased our brothers' load; One forehead smoothed, one pang of torture less,

One forehead smoothed, one pang of torture less, One peaceful hour a sufferer's couch to bless, The smile brought back to fever's parching lips, The light restored to reason in eclipse,

Life's treasure rescued like a burning brand
Snatched from the dread destroyer's wasteful hand—

Snatched from the dread destroyer's wasteful hand—Such were our simple records day by day,
For gains like these we wore our lives away.
In toilsome paths our daily bread we sought,
But bread from Heaven attending angels brought;
Pain was our teacher, speaking to the heart,
Mother of pity, nurse of pitying art;
Our lesson learned, we reached the peaceful shore
Where the pale sufferer asks our aid no more,—
These gracious words our welcome, our reward,
Ye served your brothers; ye have served your Lord!

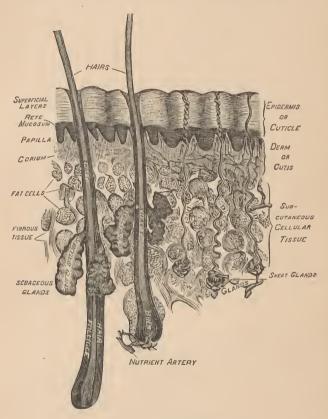
-- Boston Med. and Surg. Journal,

A man traveling along a country road found another lying by the wayside, and his horse waiting for him to remount. Traveler No. 1 inquired what the difficulty was, and being informed by No. 2 that he had fallen from his horse and fractured his leg, responded, "Oh! is that all? I thought you had the toothache." This little ancedote fairly illustrates the fact that in order to properly appreciate suffering we must have suffered.

As not a few of the ills to which we are subject in life come to us from without it is important that I first call your attention to the anatomical construction of the skin, the influence it has upon the general health,

and the great necessity of keeping it in a normal condition by frequent bathing.

We have here a cut or plate showing the two coats



THE SKIN AND ITS APPENDAGES. (GRAY.)

or layers; the derma or cutis vera and the eperdermis or euticle. The cutis vera has two layers, the deep or corium and the superficial or papilla. The perspiratory glands of the skin are scattered everywhere throughout the integument, being most abundant on the anterior

portions of the body. They consist each of a slender tube about $\frac{1}{400}$ of an inch in diameter, lined with glandular epithelium; they penetrate the entire thickness of the skin and terminate below (as you see by the plate), in globular coils. A net-work of capillary vessels envelope the coils and supply the glands with



PACINIAN CORPUSCLES.

a, the stem; b, fibre of nerve; c, d, sealy sheath; e, axis or cylinder; f, a division of the axis. These are the ends of the nerves of sensation. (HARTS-HORNE.)

the material necessary for their secretion. The skin is tough and elastic, and protects the deeper structures from injury, and is an exerctory organ. On the *corium* are the sensitive *papilla*, by which agents we experience the sense of touch. Their average length is about the $\frac{1}{100}$ part of an inch, and measure at the base about the

1/250 part of an inch. They are more numerous upon the palms of the hands and soles of the feet; around the nipples they are longer and more closely collocated and are arranged in parallel curved lines, forming the elevations seen upon the surface of the skin. In those parts where the sense of touch is highly developed, the papille are connected with the pacinian corpuscles; and hence we can account for the semi-pleasurable, semi-painful sensation called tickling, experienced by contact with some light, feathery substance, as when a straw is drawn across the end of the nose or other sensitive portions of the body.

The epidermis or cutiele (scarfskin) is an epithelial structure accurately moulded on the papillary layer of the derma. It forms a covering to the true skin and limits the evaporation of watery vapor from its surface. The formation of the epidermis is in cell form; the cells are developed in the liquor sanguinas which is poured out upon the free surface of the derma. The deeper layers, according to Koelliker, are of a columnar form, and are arranged perpendicularly, forming single, double or triple layers and covering these eells; they are in the form of lamina or scales and are flattened, dry and transparent. The black color of the skin on the negro, and the dark color among some of the white races, is due to pigment, or coloring matter, in those cells. I have no doubt many young people, especially the young ladies who possess this pigment to excess, would like to be scaled solely for complexion's sake. The glands are very abundant in some parts of the body. According to Krause, there are about 500 to the square inch on the posterior portion of the body; on the anterior about 1,000; and on the soles of the feet and palms of the hands 2,700. According to the same author the whole number of perspiratory glands is about 2,381,248, and the length of each tubular coil being $\frac{1}{15}$ of an inch, the aggregate length would be about 153,000 inches, or $2\frac{1}{2}$ miles, presenting a surface of about eight inches square for evaporation and earrying off heat.

The perspiration is a clear, colorless fluid, with an acid reaction, and a specific gravity of 1.003 or 1.004. It is composed of the following constituents:

Water	995.50
Chloride of Sodium	2.23
Chloride of Potassium	0.24
Sulphate of Soda and Potassa	0.01
Salts of organic acids with Soda and Potassa	2.02
<u></u>	000.00

Thus it can be seen that the porcs or emunctories act as the sewers by which the effete matter is earried away, which matter, if allowed to remain in the circulation, would poison the system, or, perhaps, lodge in some vital organ, as the lungs, liver or kidneys, and result in dangerous diseases or death. It can readily be perceived then, how important it is to bathe frequently, and keep the skin in a healthy condition, by preventing the elogging up of the pores. It is truly wonderful how some persons can neglect and abuse themselves in this respect and still live. I once had a patient, a mechanic plying a dirty trade, who had been indisposed for several months. I advised him, among other things, to bathe occasionally, at least to change his linen often, and never to sleep in the underelothing in which he worked. He told me he was fearful of taking cold, and in reply to my inquiry declared he had not bathed all over for more than six months past. I have frequently been called to see sick

children whose undergarments were so filthy, and whose whole person was so besmeared with rancid goose grease, gummy and siekening syrups of home manufacture, and abominable applications of fried onions, garlie, etc., that I disliked to make other than a easual examination of their little ehests where I apprehended lung difficulty. Poor children, how they do suffer at the hands of ignorant mothers. How often do physicians hear the exclamation: "Wall, Doc., I had ter send fur you, fur I have given that ere child everything I ever heerd ov, an' it kep a gittin' wuss all the time. I fust giv it goose grease and molasses; then I giv it hoarhound tea and rock eandy; then I giv it a dost of castor oil and turpentine; then I put fried onions on its breast, and I roasted an onion and giv it the juice, with loaf sugar; then I greast it with lard and turpentine, and passed it through the rungs of the ladder back and to three times, for Aunty Johnson said it was liver grown, and that was a sure cure. Then Elder Jenkins sed he thought it had water on the brain, and if I would poultiee its head with eow dung, mixed with the milk of a eow that let her milk run. it would eure it, but, Doe., all has done no good! so I thought I would see if you doctors could do anything for children. Elder Jenkins sed that doctors allers kills babies, eause he sed doetors' medicines is too strong for children. It pizens them; but do, Doc., save my baby, and it will be a feather in your eap!" Hundreds of children who are now "sleeping the sleep that knows no awakening," might have been saved had their mothers been taught hygiene, or the common sense duties essential to the proper management of the nursery. How common it is to see a mother tossing or churning her young babe in the air until its stomach

siekens, and it can no longer retain its food, and then when the dear little babe frets she presses it to her breast and forces it to again gorge or overload its little stomach, and then she commences the churning process again; or, still worse, she tosses her poor sick child upon her shoulder, then elasps it to her bosom, then rushes from one corner of the room to the other, plying it to the breast, trying to pour water down its throat, suddenly raising it from a reclining to an upright position; and not unfrequently, when the little sufferer is gasping for breath, the thoughtless mother adds to its asphyxiated condition, by smothering it with kisses. Oh! gentle mother, stop and refleet, and imagine yourself siek unto death, when a slam of a door is magnified to the thunder crash, or a tread upon the floor assumes the proportions of the mighty tempest, or, when the rude nurse, in quickly elevating your head for a drink, caused you to feel as if earth was passing from your vision, and all that was dear to you was blotted out, a nanseous feeling as that of death erept upon you, you heard the death knell ringing in your ears, and felt as though you would give worlds, if you possessed them, to be left undisturbed and alone. If so, then you can form some idea of the torture you are inflicting upon your darling child when you treat it in sickness as I have just described. In the name of a mereiful God, mothers, be ye mereiful in this respeet to your children; rely upon your physician, if a good one, and never employ any other. Do not listen to idle gossipers and the superstitious, who always imagine they know more than the physician, but give your suffering child and friendly nature a chance.

The habit of teaching children to fear doctors is a bad practice, and frequently increases the troubles of the parents, when they have sickness, by the little sufferers becoming terror-stricken when the physician is ealled in, by becoming so restless and excited that it is almost impossible to examine them and make a correct diagnosis. Children should be taught to love and respect all honorable physicians, not to fear them. I have visited houses where every child, able to run, broke for the streets and ran screaming, whilst the little patient was almost thrown into convulsions at the sight of the doctor, from pure fright.

Much attention should also be given to the temperature and ventilation of the rooms of the siek, espeeially of ehildren; and even when in health, you must attend to these things, if you desire to retain that great boon-good health. By all means air your beds often. and especially in the winter season, for it is then that the great error of preferring warmth to pure air is most prevalent. No one can endure a close, impure atmosphere in poorly ventilated rooms, with damp walls, and a temperature often varying from 50° to 80° in the 24 hours. Dampness in cellars—water standing in them—or decaying vegetables, is calculated to develop or foster disease, and should never be tolerated: also, buildings with floors upon the ground, with no ventilation beneath the floor, can not be productive of health, but the converse; whether there are cellars or not, there should be ventilation under the ground floors.

The pernicious habit of drying clothes in rooms in the house is also worthy of note and condemnation. This should never be practiced; better even neglect the hygicine laws—a neglect of a change of clothing—rather than be guilty of such practices. "Of two evils choose the least." Another matter of very great importance is the use of wall paper containing arsenic.

Many persons have become invalids by living and sleeping in rooms papered with wall paper containing beautiful vines and flowers made brilliant by the aid of arsenie; better have bare walls, either whitewashed or ealsomined, than to decorate with fine papers to deal death to your family. Our beautiful colors, made by using the analine dyes, are also poisonous, and deaths have occurred from wearing clothes that were dyed with those dyes, also very serious skin cruptions frequently occur from the effects of the arsenie contained in them.

It is really wonderful how much our physical organizations have to contend with from outrages committed upon ourselves, either through ignorance or indifference. I will also call your attention to another suicidal praetice wieh is common in all large towns; that is the practice of using water from wells in close proximity to privy vaults or water closets. This practice merits great condemnation. A well will draw from a vault a distance of at least seventy feet, and in a gravelly soil twice or three times that distance. I trust my readers may not overlook this all important matter, and through neglect or a desire to save a dollar, permit their families to drink such filth; far better make a large eistern and put in a filter and catch their water in winter; then you will have the purest of water, if made proof against rats and insects, which is very essential. Water closets should never be close to your houses, and pools and gutters containing water or filth should not be permitted to exist; the water closets should be disinfected several times during the summer with lime, sulphate of iron, carbolic acid or permanganate of potash. One drachm of permanganate dissolved in half a barrel of water is one of the best deodorizers and disinfectants we have.

It is much better, when possible, to sleep in the seeond story, especially during the summer months; by so doing, you escape much of the foul stench arising from vaults and decomposing matter, as foul gases usually lie close to the earth during the dampness of night; especially is this so in malarial districts.

It is also a common custom to keep a lamp or gas burning all night. This is a very dangerous habit, aside from the danger of an explosion of the lamp; it is asserted that one lamp will consume about three times as much oxygen from the atmospheric air as one person, and gives off in return three times as much carbonic acid gas, a deadly poison when inhaled, thereby poisoning the occupants of the bedroom. Let me warn you against this abominable practice, which is common to almost every family of the land. Plenty of pure air is an essential to health, either night or day. Many prefer a close bedroom, with all its impurities, lest the night air might injure them. A fashionable lady, but ignorant of hygiene, said to her medical adviser, who recommended plenty of pure air in her bedroom at night, "Docta, is not the night ash vewy umwholesome?" He retorted by saving, "Madam, it is the very best air we can get after night." According to the investigation of various observers, the average amount of atmospheric air taken into and discharged from the lungs at each respiration is about twenty (20) cubic inches. Calculating the average number of respirations to be eighteen per minute, as the mean average between waking and sleeping hours, it amounts to three hundred and sixty (360) cubic inches of air inspired per minute, twenty-one thousand and six hundred (21,600) cubic inches an hour, and one hundred and ninety-four thousand four hundred (194,400) cubic inches in nine hours, the average number a healthy laboring man sleeps. This would make one hundred and twelve and a half $(112\frac{1}{2})$ cubic feet of atmospherie air taken into the lungs of an adult in nine hours of sleep. Eleven (11) persons sleeping in a room twelve (12) feet long, ten (10) feet wide, and ten (10) feet high, would convert all the oxygen into earbonic acid gas in nine hours. How common it is to find families where five or six persons sleep in a close room in winter, but little larger than the one I have enumerated, and that too, with a lamp burning equaling three more persons, and perhaps one a consumptive at that. Therefore, is it not a wonder that more do not sieken and die?

How often we find parents or grandparents sleeping in the same bed with two or three little ehildren, with doors and windows closed, and each one breathing in again the carbonic acid gas and poisonous exhalations from the lungs of the other, and, in addition to this, the old people drawing the animal magnetism and vitality from those innocent children, thereby prolonging their days at the expense of these young lives; and what is far worse—since it is more positive and direct sowing in them, by sympathetic transmission, the seeds of premature deeay, and, perhaps, early death. Ah! ha! how old gray-headed men love to marry blooming, healthy young wives. Not only through love, but, also, through selfishness, are these old fellows inclined to the "buxon, blithe and debonair" lassies. The gay old foxes, they well know that they get a new lease on life at the expense of such wives. Be eareful, young ladies, about marrying old men, unless they are exceedingly wealthy and you have a goodly share settled in your own right, and furthermore, that you prefer money to health and happiness; do not marry them,

for as sure as you do, and live, you will pay the penalty even to the very last farthing.

I have an old friend who, at the age of 76, married a hale, hearty young girl; he was then in poor health. Ten years later his health had almost miraculously improved, while that of his young wife had correspondingly suffered. Age and youth! "Oh! ill mated pair," should not be found sleeping in the same bed chamber; neither should a person of sound lungs marry a person with diseased lungs, for two reasons: First, the sound person may acquire the disease; and second, because their posterity will inherit the malady. Hence, a whole family may perish prematurely, because one parent was unfit to assume the duties of the married state and beget healthy children. This doctrine may seem hard, and even impossible, to the ignorant and incredulous, but I make bold to assert that no man or woman should marry, when either is aware of being afflieted with an incurable disease that is transmissable to posterity. In ease they do marry, they but hurry to a close the evening of their own day of life, and leave their children a burden to the state, and weighed down with an orphan's inheritance of misery and woe.

There is another topic to which I desire to call your attention, in this connection, for the benefit of old people and those of you who may be fortunate enough to live to be old. It has been said, as you are all aware, that cold winters take the old folks from us. This is true so far as the taking off is concerned, but it is not strictly true with respect to the winter. It is neglect that kills off the old folks, and while we lay the proper share of blame on the coldness of the weather, we must not forget that our lack of precaution against it is also blameable. Most people believe, and with some

reason, too, that cold weather conduces to health; with regard to the robust and healthy, and favorable surroundings, cold weather acts as a stimulus; but in the case of the delicate, the invalid and the aged, the contrary is more likely to be true. The greater number of old people who die during cold winters, die of pneumonitis (lung fever), and the origin of this dangerous disease is attributable to earelessness with regard to sleeping apartments. Very many persons sleep in damp, badly ventilated rooms, with the rank odor of the fungoid growth known as mildew pervading their every nook and corner. Numerous others sleep in apartments where the temperature stands at 70° or 80° on their retiring, and by three or four o'elock in the morning it has fallen to 30° or 40°. The bed clothing that was sufficient for warmth when the temperature was at 70°, is now totally inadequate, and the aged father or mother is unconscious of the great change until aroused by being chilled with the severe cold. It is then too late to put on more covering, the harm is done. But you will ask, "What shall be done, since a chamber with fire and one without fire are equally unhealthy." If your sleeping apartments are remote from where you cook or sit, you should have a fire in them every forenoon to dry up all moisture, after airing them for an hour or more. If you have fire-places in these rooms, leave a little fire in them both day and night. The safest plan, especially for aged people, is to have the temperature at from 55° to 60° during the entire night. Most aged persons "take cold" during sleep, and this precaution, as to temperature, will do away with this liability to become chilled.

My friends, those of you who have aged parents, and desire to discharge your natural and filial obliga-

tions to them, must see to it that they are comfortable in every respect, not only in the bed-room, but at the table and in the sitting-room as well. Oh! how many sleepless nights and restless days has that beloved mother passed with solicitude at the crib, watching you in your infancy, when fever racked your brain and fell disease threatened your very existence! How the tears that told of sympathy and love and heartache stole silently down her cheeks, pale and wan, as she bathed your aching head, Has she not lifted up her voice in prayer and sighing, and in tears besought the great God to spare her darling child? And the dear old father, whose familiar tread was known to the household-to von, his children, who, each noon and night yied with each other for his first kiss, or for a seat upon his sturdy knee to be affectionately earessed you must remember that it will shortly be your duty to grasp the withered and chilled hands of your aged parents and lead them tenderly over the rugged places that beset their declining years. It will soon be your turn to sit by their bedside in sickness and bathe their aching heads. Remember the Biblical injunction, "Honor thy father and thy mother." Never neglect the dear parents who were ready to sacrifice all for you; and may none of you ever be so ungrateful as to deserve to have quoted against you the lines of the poet Carleton:

"Over the hills to the poor house, I'm trudging my weary way, I, a woman of seventy, and only a trifle gray;

I, who am smart and chipper for all the years I've told, As many another woman, that's only half as old."

Yes, ere long these old landmarks will be blotted out; ere long their familiar voices will be hushed in the silence of the tomb. The finger of time has furrowed the faces

of these saintly personages; the frosts and snows of many winters have whitened their thin locks; the burdens of life, heroically borne for children's sake, have bent down their forms, and now, on their nigh approach to the dark river that separates time from eternity, let not youth be so irreverent as to speak of or to them as the "old man" and the "old woman!" They have given the parental blessing to children launching their barques upon life's stormy ocean; they have rejoiced and prayed, and were glad over their children's suecess; they have fought the good fight in the discharge of honest duty, and they now deserve well, especially of their children. Young man and young woman, you can in no way better manifest good character and good qualities than in earing for, and honoring your parents and the aged, for ere long they will pass to that shadow land across the river of death.

SHADOW LAND.

Far from the world that we live in to-day
Shadow land lies;
None know how far it is, none know the way,
What are its boundaries no one can say,
Only surmise;
No one living has set foot on that shore,
Formed from the wreck of the sad nevermore.

Memory governs this shadowy land,
Reigning supreme;
Ofttimes there eomes at her word of command
Forms we have known from the far distant strand
Faint as a dream;
Forms of those dear in the days that have flown,
Forms of beloved ones in life's morning known.

With them they bring back the scenes of the past
Back to our view;
Pictures of friendship not destined to last,
Love that grew weak 'neath adversities' blast,

Painted anew;

Ridges and ripples in Time's shifting sand, Hidden till now in the far Shadow land.

-New York Evening Post.

Among the points hygienically considered thus far, it will be necessary to mention the clothing. To be properly clothed,—that is, with respect to comfort rather than to style,—is a matter of no small importance. We should regulate our clothing according to the weather, and our garments should be made so as to fit us nieely. Tight-fitting clothing is very injurious to the health; this is especially true in the case of illfitting and tightly laced corsets. On the corset question I do not agree with the declarations of not a few lecturers on hygiene. On the contrary I believe that a woman is not injured by wearing a corset that fits her, particularly when it is not so tightly laced as to crowd some of the vital organs out of place or interfere with the breathing or the circulation. There should be a sufficient quantity of under-clothing worn to protect the body from sudden changes of temperature, and these garments should be changed once every week in winter, and twice or thrice in warm weather. During the sultry mouths of July and August we should change every day, if possible. A concomitant precaution of these injunctions is that we never sleep in the under-garments worn during the day; for if we do, much of the effete matter carried to the surface by the perspiration may be absorbed and settle, as I have already said, in some of the vital organs and result in disease or death. Frequent bathing, on the same principle, is very important to the health, for, by it, the sewage carried to the surface of the skin, through the pores, is washed away, the pores themselves kept open, and the eapillary circulation bettered and preserved. It further performs the office of a remedial and medicinal agent, as is exemplified by Dr. R. T. Trall's System of Hygienic Medicine, known as Hydropathy, or Water Cure. Although his teachings were fanatical and narrow, it must be admitted that they were of some benefit at least to those who believed in wearing clean clothes over a filthy skin.

I now remember to have been called, on one occasion, to see a young lady who was suffering from a case of acute rheumatism. Her mother, after giving expression to the intense suffering which the young lady had undergone, remarked, as she elevated the bedspread, that her foot, about the ankle, was black and blue. I found, however, upon examination, that soap and water would remove the discoloration.

It is frequently very difficult to get persons to change the sheets or linen about their sick friends, fearing lest in so doing they might get cold. The apprehension is groundless when proper care is observed; and even at the worst, a cold, in some cases, is not to be regarded as more injurious than sweat-soaked sheets and filthy under-clothing to the sick one. Cleanliness is next to godliness with the sick or the healthful. Every house should have a bath room, or at least a bath tub. There is nothing that regulates the appetite, the skin and the temper as does the bath. Animate and inanimate nature rejoice in the kindly offices of pure cold water. A shower quenches the burning thirst of nature; it freshens the forest foliage and deepens the verdure of the

green savannas; it cools and moistens the atmosphere, and all things seem aglow with gratefulness for a bath in the limpid depths of the God-given water. Under its charming influence the little birds sing as if it were their last chance for melody-making; the smaller ereatures in myriads rejoice and gambol on the green sward, and the woods and vales resound with hosannas of thanksgiving for the blessings of the bath. Man alone, though fitted for every enjoyment, stands aloof from this great boon, and will often go for days, weeks and even months without bathing any part of the body, save the face and hands, and even then giving them only a very slight introduction to that purifying element, or as some would term it, "a three-fingered wash." If we could but see ourselves in our true colors, we would be greatly benefited, or, as Burns puts it—

"Oh wad some power the giftie gie us,
To see oursels as others see us!
It wad frae mony a blunder free us,
And foolish notion:
What airs in dress, and gait wad lea'e us,
And even devotion!"

Physical exercise is necessary to development and health. All children should be induced to take such exercise as tends to develop the lungs and the general muscles. Active exercise of all the muscles is essential for girls and boys; hence, they should be put through a regular course of gymnastic or military training. Much of this exercise should be taken out of doors, in the air and sunshine, for God's air and the bright sunshine are necessary to our being. But few young ladies have properly developed chests; their breathing capacities are deficient, in consequence of

lack of healthful exercise, and many die young from consumption for want of museular activity, pure air and the bright sun's rays. How can we expect girls and boys to grow up rugged and healthy who negleet these rules, and who scarcely ever make a brisk movement, or sniff the morning air. Look at the dwarfed and delieate appearance of a stalk of corn, or any other plant, growing in the shade, or only getting a glimpse of the king of day in the morning and at evening. If lack of sunshine is manifest in vegetation by the lack of development, we can, by analogy, infer how essential it is to us. Do not let your fear of being tanned cause you to flee from the face of Old Sol. If he tan you a little, he will bless you with good health on the other hand. If any one of your family are confined to their room by siekness, be sure and locate the siek in the south or southeast part of the building, for it is there that they will have the benefit of the sun's rays for the greater portion of the day. Girls, if you desire to escape that fell destroyer, consumption, you must take plenty of exercise in the open air, and as often as possible while the sun is shining. Throw the shoulders backward, take deep inspirations, slow and regular, and learn to exercise your lungs as well as your whole body. Do not be ashamed to aid your mother, or the servants, in the performance of house work; roll up your sleeves and aid the cook, and learn from her not only how to gain physical strength, but also-and especially-a thorough acquaintance with the culinary art. Properly prepared food forms so prominent a feature in good digestion, that the young lady must be very dull indeed who can not see how necessary it is that she should be a good cook and

housekeeper before she undertakes the responsible position of wife and mother. I enjoin this as a most sacred duty upon mothers that they teach their daughters how to keep house, and prepare wholesome food for the table. We all know how unpalatable it is to eat food improperly cooked, and how dangerous to health



TRICHINE.

After a preparation from a human body dying during the Hedersleben epidemie. Trichinæ, probably about seven weeks old, completely developed, but without a trace of a capsule; spindle-shaped enlargements, of sarcolemma were present. (Luchart.)

it may prove under certain circumstances. Pork, for instance, should be well cooked, in order to destroy the trichine, should there happen to be any of those little parasites present.

I have here a magnified illustration, showing the mode of being of these delicate little creatures, and how stylishly they present themselves.

Substances used as food are unfit for use when decomposed or adulterated. The adulteration of food is earried on to an alarming extent in the world to-day. Among the numerous articles tampered with, I might mention sugar, baking powder, vinegar and butter. We have now a modern article of butter, called oleomargerine. This abominable stuff is often made of rancid and rotten tallow and lard, eooked up with ehemicals, and made to appear identical with that oily substance which we get from pure cream, and which deserves the name—butter. And right here, among the adulterated articles of food, I might also mention the long list of impure and poisonous beverages, both distilled and fermented. When taken to execss, or to any great extent, they are highly pernicious to health. Searcely less so are some of the popular temperanee drinks, one of which is called soda water. What a mockery it is for the dispenser of this stomach-gnawing slop to ask you, "What svrup will you havevanilla, pine apple, strawberry, peach or raspberry?" Do you not know that these villainous compounds are born of chemicals of a poisonous nature, and that they do not contain even a particle of the fruits they are employed to represent? No; not even has a smile from luseious fruits eonsecrated these damnable deeoy syrups. We shall shortly become a nation of poison eaters and drinkers, if we do not bestir ourselves, and be on our guard against those tricky, unconscionable persons who, for pelf, are ready to eheat and poison the people. As far as being a nation of poison drinkers, there are those who assert this with emphasis, and, indeed, some go far to prove the charge true. I will not be so unreasonable as to declare these things; but I can say that all of the aleoholic beverages of the day

are poisonous, when used to excess; that drunkenness is rampant, and that the drinking habits of society are the curse of our age and generation. Drunkenness is a moral and physical disease; it has sent millions to premature and dishonored graves; bankrupted thousands; erowded our prisons, alms houses and asylums; filled the world with pale widows and starving orphans, and wrought more damning misery than pestilence, famine or war. It has left its impress upon thousands of parents, which passes to posterity, eausing some to be born with unfortunate and destructive organizations, stamping every act of their lives with the lowness of crime and sin. It fills our streets with brawls and profanity; eauses the murder of many innocent men, women and children, and brings glaring damnation to once happy homes. It is the precurser of prostitution; the blaster of hopes; the breaker of hearts; the destroyer of domestic peace; it is the "wife's woe and the ehildren's sorrow." This hydraheaded monster is the "bane of all that is sweet in life; the frost of the spring of man; the sigh of his loudest laugh;" the mocker of his joys and the echo of his wailings, and the dark cloud that o'ershadows prosperity's noonday sky. Parents through its influence force their children to beg and steal, and thousands of boot-blacks and news boys to-day, in the eities of the world, run in the streets half elad and half fed, who, when they go home at night, have what little they may have earned taken from them and spent for liquor by their inhuman parents.

Some years ago, I was treating a little girl for pneumonia. She was very sick and the family was quite destitute. On the fourth morning that I visited her I found her alone, not a soul to minister to her press-

ing wants. All the furniture, save the bedstead, together with the dishes, etc., were smashed into small pieces and piled upon the floor. I asked her how it all happened, and she said: "Father came home drunk last night, whipped mother, broke up all the dishes and furniture, and was arrested and taken to the station house, and now mother is down trying to get him clear, if she can." I know of another whisky ease where the mother died of apoplexy, superinduced by excessive drinking, leaving behind her, in poverty, a large family of children and a broken-hearted husband; and so I might fill pages relating such seenes of my own observation. The constant use of alcoholic liquors produces disease of the liver, kidneys and of the nervous system. Delirium tremens, paralysis, apoplexy, insanity, disease of the heart and arteries, diseases of the skin, inability to resist epidemies or injuries, and spontaneous combustion, or eatching fire from the breath, by coming in contact with a flame, and burning up. Cases of this kind are rare, it is true, yet such authors as Carpenter and others place the matter beyond question, by eiting eases where the luminous and phosphorescent appearance of the drunkard's breath renders it visible in the darkness. Carpenter thinks this luminosity is due to the retention of phosphorus in the eirenlation, and to its being converted into a highly inflammable gas. Did time and space permit, I might talk to you for hours upon the physical changes excessive use of spiritous liquors produce in the system; but enough has been said to suit my present purpose in showing the evils attendant upon the immoderate use of alcoholic stimulants, and that when such a foolish course is persisted in, fatal results must be the cousequence in every case. Be ye temperate then in

all things—in eating, drinking, sleeping, working. If you obey this injunction your happiness will be very much increased in this world, and, as you may believe, not lessened as far as the next is concerned.

Habit of eating is of no light significance touching health. It has much to do with our enjoying the minutes devoted to taking our meals, the food itself, and the good we may derive from it in the way of nourishment. All Americans cat too fast, or as it is commonly termed, they bolt their food.

An American and an Englishman were traveling together by rail. A twenty' minutes stop was made at a way station, for dinner. The Englishman gave orders very deliberately and composedly for the dishes he wished, but the American took what he could get, and was throwing the food into his stomach without proper mastication. He was in a great hurry, and his mind was evidently ill at ease; seeing how deliberately his English friend was enjoying his meal, he remarked to him, "Hurry up and finish your dinner, or you will miss the train." The Englishman replied that he presumed there would be another train going the same way sometime, and he preferred to wait for the next train and take his good time to eat his dinner. The American remarked that he must cat rapidly, as he could not spare the time to wait over. "My dear man," said the Englishman, "you will have to spare the time to die, some day." Our Yankee friend bade the Englishman adieu, and urgently solicited him to call upon him on his return from the west. Upon his return, some six months later, he stopped off to visit his Yankee friend. The cemetery being near the depot, and seeing a funeral procession passing in, he thoughtlessly inquired who it was that was about to be

interred, and, on learning that it was his quondam traveling companion, he said: "Ah! poor fellow, I knew he would ultimately kill himself by eating so rapidly."

If we were provided with a double stomach as the eattle are, we might eat very fast, and at our leisure belch the food up for re-chewing, as they do. Most Americans, especially business men, eat as if it were a matter of business of a very disagreeable nature, and they hurry through the operation as rapidly as possible. Others eat as if it were a very solemn and sacred duty, clustering a sort of last supper owlishness about the act. They seem to regard it as a breach of morality to talk while eating. Others again, believe that the chiefest enjoyment of life consists in gormandizingfilling their stomachs to repletion, then pressing it down and eating more. But few people eat properly eat so as to live and be healthy and happy. Many fashionable people regard it as vulgar and unrefined to eat in the presence of their children, at least until they are full grown. This is a grave error, and if a socalled etiquette prescribes this as a rule, that etiquette is damnable. It is no mean accomplishment to know how to eat in accordance with the demands of our being. This physical culture we must regard as an element in the training of our children, and we should practically teach them by example how to eat, by sitting down and eating at the same table with them, and always in our happiest mood. At table we should be cheerful, and our topies of conversation should be of the livliest and most genial character, elevating, instructive and cheerful, never weighted down with wordly selfishness or the cares of business. Under no circumstances should your sick neighbor, death-bed

seenes, or anything that tends to the melancholy, be introduced. Some parents who are good enough to eat with their little ones, are, on the other hand, foolish enough to seize the opportunity which the meal hour affords to chastise their little children for slight misdemeanors or shortcomings. As a result of this, meal time is not a welcome hour to children. By this inhuman practice their digestion is destroyed, and their lives are cursed to a greater or less extent. When to this barbarity is added the heathenish habit of obliging children to partake of food that is distasteful to them, and that other, of threatening some deprivation or pain unless they eat all the food on their plates, thereby overloading their stomachs and often causing death—I say, when these things are practiced, even in this, our day of civilization, enlightenment and religion, it is high time that every human effort be put forth to stop it. Mothers should never entrust the care of their children during meal times to servants or nurses; and this should be especially observed in the case of infants with respect to wet nurses. The kind of food, and, also, the quantity of the food given to children, plays an important part in their physical organization; and if you wish your sons and daughters to grow up into stout and vigorous men and women, you must see to it that they get good, substantial food, properly cooked. The nasty habit of not a few mothers, afflicted with bleeding gums, deeayed teeth, and often with their saliva impregnated with tobacco, of first masticating the food for their babies, or cooling it in their mouths, to the great impurity of the food, is an outrage upon these helpless innocents. Poor little sufferers, they had better swallow the food without mastication at all, than be compelled to take into their little stomachs such vile, disgusting, poisonous, diseasefostering stuff. Children, especially babies, should not be overfed, and great eare should be exercised in the selection of their food. This, and kindred matters, I will fully explain in my lecture to women on Home. In that lecture I will show why the wet nurse nuisance should be abolished. How can any mother know that the wet nurse is free from all blood diseases, or other transmissible ailments? Ah! mothers, little do you know about the various eauses of your children being delicate. Do devote a little time, and open wide your eyes to the laws and principles of life and health. Nearly all, if not all, of you go to church on the Sabbath, once or twice at least—to regular service, mass or prayer meeting-in order that you may die in the fear of the Lord-piously and religiously-and whilst this is all proper and right, I ask, ean you not also devote at least one hour each week to learn how to live and make home happy? Gentlemen, see to it that your wives and daughters have facilities for informing themselves on these important matters, for the investment will pay eventually.

This may be, and no doubt is, a digression from my subject, but, my friends, you will pardon me when I say to you that husbands and fathers should not consider wives and daughters purely as domestic beings, fit only to cook or care for the house, or as exotics or house-plants, to be petted and looked after as creatures incapable of taking care of themselves. Give your daughters the same opportunities you give your sons, that they may qualify themselves for fighting the battles of life. How many hundreds, yes thousands, of women and young girls are to-day over the wash-tub, or toiling in some factory, or worse than all else, aban-

doned and damned forever, who can say, my brother is a physician, a lawyer, a merchant, a banker, an editor, a teacher, or a mechanie; but my father thought girls did not need an education or a trade: he died bankrupt, and I am compelled to go at any kind of work I can get, and, being almost totally unfitted for anything, I can seareely earn enough to keep me from starvation. Poor, unfortunate daughter, it were better she had never been born! Young man, never marry a girl whom you do not consider your equal. Young lady, see that you marry a gentleman, one who believes women have souls; one who is not backward in accompanying you to places of public entertainment, and who is willing you should think and aet for yourself, and not be the mere living eeho of your husband. I hope to see the day when men will see the necessity of educating their daughters equally with their sons; I hope to see the day when, universally, women shall have the opportunities men have to study and practice medicine; to practice law; to lecture; to vote and hold office, and be the equals of men on the broad basis of human rights. Let women of intellect have an equal opportunity with men to acquire riches, honor and fame. Let all rise or fall according to merit or demerit, regardless of sex. Away with your poetic twaddle of the vine clinging to the oak! In an active practice of twenty years I have seen more oaks elinging to vines, than vines clinging to oaks. Indeed, I have seen the sturdy oaken husband, with an oaken heart, carrying baskets of elothes from neighbors' houses for their clinging vines of wives to wash, for their benefit. have known them to condescend to saw and split the wood, return the clothes, when washed and ironed, and then wile away their odd hours in saloons, spending

the money their wives have earned and given to them, or they have demanded or forcibly taken. Poor vines, how I pity you! Methinks I hear some tobaccochewing, whisky-guzzling, snuff-using, saloon loafer, say: "Wal, I believe women have more rights now than they orter have, and besides it will ruin 'em if they git to votin'. Our homes will be broken up; our wives and daughters will come down to (our level) degradation and debauehery. They, too, will learn to chew, smoke, drink and tell vulgar stories in saloons, and become just like ourselves." Others are so solieitous as to the moral well-being of women that they do not want the dear, blessed creatures to mingle in the dirty slough of polities. What, in the name of all that is good and great, is there in polities that is so degrading? Is the political arena so vile, the deeds of politieians so corrupt, and men generally so impure, that their very breath will wither and blight all that come within reach? If these be truths—yet women live with some of them—then, for those very reasons, I say let women have the ballot, that they may weed out and purify all evil doers. Who will dare deny that women are the great refiners and reformers? Then let her vote, that politics may become pure and good; that our land may be a free and noble country in deed and in truth. Let her vote, I say, that villainy shall be punished, justice be meted out to all, irrespective of sex, and that men shall be the equal of women, not their superiors; and, in fine, that the last shaekle of human slavery shall drop from off the hands and hearts of women—that our blessed mothers and sisters, wives and daughters, shall be, in deed and in fact, recognized as independent human beings. How ean any intelligent man entrust the eare and moral training of his

children to an inferior being; one whom he regards as ineapable of thinking or acting for herself; one, in short, who is but an animal of some tastes, and liable to be influenced for wrong by surroundings—a being without intellect, a fool, if you please. But, says one, "my wife is clever and well educated, yet I do not wish her to have the privilege of voting, which will, necessarily, oblige her to mix with yulgar men and women." Women, I am sorry for you, if your husbands talk thus. Do they consider you incapable of preserving your dignity and defending your virtue? Have they no faith in your identity, in your morals, in the goodness that they know you possess? Who are the guardian angels and protectors of our morals? Are they the men, or the women? Why is it that so many poor unfortunates daily and nightly crowd our streets? Is it solely due to their own weak or vicious natures, or is it not due, in great part, to the damnable villainy of men? I am sorry to have to say it, but the responsibility for such wreeks is not confined to the young man, but it is traceable and attaches to grav hairs also. What punishment do these young and senile raseals usually undergo? these wretches who blast bright hopes; these perpetrators of the most God-eursed crimes; these robbers of the pure white lily of woman's chastity—that which when they touch they tarnish, which they rob, but can not restore-why they go unwhipped of justice, assume an impudence that would make Satan blush, attend fashionable churches and social gatherings of our best-so-called-people, and hold high heads in the highways, while their victims are onteasts, loaded down with their shame and sin, wallowing in the mire of infamy, or dropping down into the shadow of death, "unwept, unhonored and

unsung." The poisoned cup, the drunken debauch, or the pistol or dagger often brings about their sad end. They die without the consolations of religion, away from friends and home, and with no pure, familiar face to gaze upon; no, only the leering and blood-shot eyes and bloated countenances of their wretched and deprayed companions. Oh! a death so unholy, so lonely and so sad! Oh! how unnatural and hellish is the deprayed, lustful passion of man! Oh! gentlemen, when you go to church you can pray for your sons and daughters, and you should also pray at home; but if you want to purify society and punish eriminals—the worst that ever lived—give the ballot to women. They will punish the seducers, they know how, and they will aid the fallen women. They will reorganize society and stand up for God, humanity and right. May Almighty God bring such a converting influence to bear upon the hearts of men as will impel them to aid us in elevating to the plane of intended usefulness the women of our country. May His providence hasten this reform, as the mother of reforms, much needed in all stations of society.

This subject, while in some respects it is not foreign to the object of this lecture, I will leave to those who can and do devote to it the attention it so richly deserves.

I will here take the opportunity to say to you, ladies and gentlemen, that if you wish to enjoy life while in this world, learn to retain or regain health, by aequainting yourselves with the laws that govern your being. How common it is for people in good health to say, "I do not wish to spend money on things I know nothing about; when siek I will employ a physician, but I do not need to become a doctor myself."

You can learn very much of physiology and anatomy, and how to preserve your health, and yet lack much of being physicians; but the advantage you will have is, that you will be better qualified to select physicians when you have occasion for them. By aequainting yourselves with the laws of life you will be better prepared to nurse the sick, administer medicines and note their effect. It is often necessary to diminish the dose of medicine prescribed, or increase the duration of time between doses, especially when certain results have been brought about, or special ends obtained. It is sometimes injurious to continue the use longer in the doses at first prescribed; therefore, if you are informed in these respects, you can greatly aid your physician and benefit the patient by thus exercising your knowledge in a judicious manner. Many persons conclude in their own minds that it is only the physicians who travel that are quaeks. This wholesale accusation I must dispute, but I am willing to admit that there are men, yes, many traveling, who style themselves physicians, who are quaeks and impostors, and who know nothing about the science of medicine or the anatomy of the human system. But men equally deficient in knowledge, professional, seientific and literary, you have in almost every city, village or cross-roads, and these you call doctor this and surgeon that. The located charlatan is worse than the perambulating quack. What little he does know, even to the unsuccessful effort he makes to write his own name, he gets by absorption. These are the impostors who aspire to a knowledge of the supernatural; who go into trances and forthwith commune with the spirit of some departed "Medicine Man" of some tribe of red men of the forest. These are the fortunate fellows who,

when children, were captured by Indians, grew up in ignorance among these untutored savages, but, fortunately before escaping, made some wonderful herb discoveries! Fellows of this ilk are those who but vesterday quit the factory, the plow, the work-bench, or the hod, and, without preparation or fitness, begin the practice of medicine, which, in their case, is to begin to trifle with human life. You all know of some such men. Alas! like the Irishman's bad weather, they are everywhere. Some of these destroyers of precious life; these pirates who use a friendly signal to allure the pain-racked patient, shipwrecked upon the merciless ocean of disease: these unconscionable wretches who desire an easy living and plenty of money, all wrung from the poor and suffering ones—I say some of these illiterate, brazen, ignorant seoundrels advertise to cure all cases of consumption, Bright's disease and eancers; and, as if friendly fate would have them betrav their ignorance, for the benefit of the public, they put on their signs, "Curers of Sores." Oh! what a libel these wretches are upon the noble profession of medicine. Next to these, but, thank God, higher up in the seale of knowledge and manhood, are the men with their diplomas, who sit around grocery stores and street corners whittling sticks and boxes,-when they should be studying,-watching for opportunities to get acquainted, and as soon as some wealthy farmer or other moneyed man is presented, they take him or them in tow, urge them to come to their offices, where their diplomas are spread before them, with the innocent remark, that parchments from such colleges of great note are very searce in this section of the country. Such men may know a thing or two, but they are as auxious to have it

known as is the little boy to show his bran new pocketknife.

Then you find another class of medical gentlemen, who talk and move as if run by machinery. They ask you questions, and exclaim at every reply, Ah! yes! or grunt and look into space, assuming a philosophical and owlish attitude, as much as to say, Do you perceive how profound is my knowledge. If another physician precede them in the management of a case, they will, when ealled, in his absence, taste and smell the medicines, and if not vulgar enough to denounce the remedies outright as poisonous stuffs, they will shake their heads, shrug their shoulders, or throw the bottles or powders out, at the same time expressing their great surprise over the very erroneous diagnosis of Dr. B .- a man of such wide reputation, and in a ease so very evident as this one is; or, after they have prescribed and differed as to the diagnosis, they will then say that it would have been better for you to have called them in consultation, as they would willingly help a stranded brother out when he got hold of a ease he could not manage. All such men, ladies and gentlemen, are quacks, impostors, polished thieves and liars; they are also contemptible cowards, inasmuch as they stab their professional brethren in the back without giving them an opportunity for self-defense.

There is a class of men and women in every community who change physicians every few days, or at least each time that they have sickness in their families. They love to display all the medicines to the doctor that the physicians preceding him prescribed. This enables the trickstering proselyter to taste and smell the remedies, and shake his head, as if to say, "it is barely time you ceased giving this vile stuff."

Thereby giving them encouragement to use their vulgar and slanderous tongues on the physicians they are indebted to, as a recompense for their professional services.

These are the ones who love to deride and abuse the profession—especially the physician they have just discharged—in public places; that class remind me of the regular boarder "who never misses a meal, and never pays a cent." They are the first to send for a physician when sick, demanding his closest attention, but never pay their bills; these are they who croak about the doctors killing more than they cure. To illustrate the character of these inhuman beings, I will give you an instance from my own experience. Some years ago whilst I was practicing in the country, I arose about four o'clock in the morning, to make my rounds, which consisted of about thirty miles of riding. A Mr. L—sent his son for me in great haste, to see a child whom they considered quite ill. I told the boy I could not possibly go, as I had already too much to attend to that day, and advised him to send for Dr. W- I returned home at eleven o'clock that night and was informed that I must visit Mr. L- immediately, as the child was dangerously ill. I had to ride three miles farther and open three fences to get to his house, which I did, to find it in darkness and the inmates fast asleep. I aroused Mr. L-- and asked him how he could so outrage me for nothing; he responded by rubbing his eyes and saying, "I w-a-s a-f-r-a-i-d t-h-e b-a-b-y h-a-d w-o-r-m-s." He never paid his bill.

I have, in this lecture, given you at least the general requisites to the preservation of health, and the

essential observances which are concomitants, with hygienic advice how to regain it when lost. You have observed, no doubt, that I have made manifest the necessity of your having good physicians; the importance of frequent bathing, and how filthiness fosters disease; that old age and youth are incompatible in marriage; and that when either of the married pair are afflicted with a transmissible malady, the other also, and even their offspring are in imminent peril; that the "rights" and the "wrongs" of women are grave and engrossing issues in themselves, and especially so when the education of the daughter is not regarded as of equal importance with that of the son.

Improper and proper habits of eating and sleeping, ventilation, open air exercise and sunshine, the effects of cold winters upon the aged people, and of the intemperate use of alcoholic stimulants upon all, medical quacks, regular and irregular, illiterate and commonly educated, have each and all received the attention that I have regarded as quite proper. Other matters, of lesser weight, I have glanced at in passing, giving instruction here and advice there, as I have deemed best and necessary.

For particularization and detail, I shall have to refer you to my regular course of lectures on stated topies. It can not be expected that I be other than general here; and if I have but succeeded in awakening your interest in the God-established laws that govern our being in health and life, I shall deem myself as sufficiently rewarded.

THE TEMPERAMENTS AND MENTAL HYGIENE

A knowledge of the temperaments should be taught in all schools, both public and private, as an acquaintance of them enables us to read the book of nature. and know the character and disposition of those with whom we come in contact. It is a knowledge all should possess, to aid in choosing partners for life, or business, and how to deal with all mankind; a knowledge which, if possessed and properly applied, would, to a great extent, do away with divorces, and aid the entire human family to live more happily. It would acquaint all more intimately with their faults, and indicate the best course to pursue to correct them. All teachers in schools should be proficient in the temperaments in order to manage their pupils to the best possible advantage. As no two children have exactly the same temperament, or admixture of temperaments, it follows that each child differs from every other. For practical purposes we divide the temperaments into four elasses, or orders, three of which are common in youth; the fourth belongs to middle life and old age. We have:

- 1. The vital.
- 3. The mental.
- 2. The motive.
- 4. The lymphatic.

Or, as most writers class them:

- 1. Lymphatic. 3. Bilious.
- 2. Sanguine. 4. Nervous.

The vital temperament is the one peculiar to childhood, but, unfortunately, many do not possess it; it is

the full blooded, fleshy child, or adult with a good eirculation and good digestion that possess it; it is often called sanguine; where this temperament predominates



VITAL TEMPERAMENT.

ISRAEL PUTNAM.

they are not good students. They are lithe and gay, love fun and despise coercion and the school-room;

they are better suited by light callings, where they do not have to exert themselves too much, such as landlords, superintendents of large factories or railroads. They prefer to be bosses and let others exercise their brain and musle, while they take their ease. Such children, if coerced too much, will not learn as rapidly as if given more liberty; close confinement to them is greater punishment than the rod.



MOTIVE TEMPERAMENT.

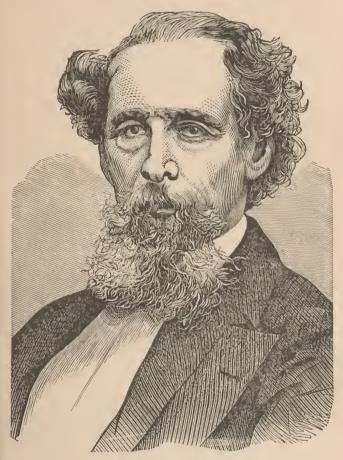
PETER COOPER, OF NEW YORK, THE PHILANTHOPIST.

The motive temperament (bilious) is the one with large and often long bones, rough and angular in appearance, and usually awkward, but tough and wiry, with muscles and ligaments like iron. Such persons

can endure great hardships and abuse, and resist disease. They prefer work of any kind to study, and where this temperament predominates they must study hard to acquire knowledge; but where the mental and motive are prominent in combination, as in Peter Cooper, they make men and women of great power and force of character for good or evil. Children of the motive temperament are usually considered drones by their teachers, and are often disliked and punished on account of their organization, for which they are in no way responsible.

The mental temperament is known by the large head, with small body and little ribbons of muscles, nervous, excitable, and more inclined to study than to work. They rather dislike work, at least heavy work, it being as great an annoyance to them as study is to those of motive temperament. Thus you see why it is that some children love to study, but hate to saw wood; whilst others love to work, but very much dislike to study. Children of the mental temperament need restraint in study, and should be taught to take physical exercise to develop muscles and build up constitutions, to give them the physical force they so much need; but the kind and amount of exercise must be suited to each ease, and never be carried to exeess, lest the exercise prove disastrous in the place of beneficial.

Then we have various grades or combinations of three temperaments, all of which will require some study to manage and understand thoroughly. I hope the day is not far distant when every school teacher will be required to pass a rigid examination in the temperaments, and that this science will be classified and taught in our public and private schools, and be considered as of importance alike with grammar, mathematics or history. Let us teach our children to know themselves, and to correct their defects while young.



MENTAL TEMPERAMENT.

CHARLES DICKENS,

A knowledge of the various branches taught in schools, morals included, are not sufficient qualifications for any teacher. They should be amply qualified to read from the book of nature what they have to deal with, and the manner in which each little one's heart shall be reached, their weak points cultivated and their vicious natures subdued. Teachers require such organizations as will give them power and self-control sufficient for them to put their own knowledge to use in controlling and managing their pupils. I tell you, ladies and gentlemen, much depends upon the teachers, as well as



LYMPHATIC TEMPERAMENT.

LOUIS THE XVIII., OF FRANCE.

upon the parents' efforts what kind of men and women our children will develop into when grown; and much, yes, very much, depends upon the parents what kind of a being they procreate. In my lecture on phrenology I shall fully explain what I here allude to in connection with procreation.

The lymphatic temperament is the phlegmatic temperament of the ancients. This temperament is due to a predominance of the lymphatic system. The lymphatics convey the lymph from all parts of the body, dis-

charging it into the subclavian veins, whence it is conveyed to the heart; the undue preponderance of lymphatics leads to an excessive secretion of watery fluids of the body, and a consequent dilution of the blood, resulting in a sluggish circulation and a clogging up of the vital functions. The muscles burdened continuously become relaxed or flabby; the action of the heart is slow, and the brain, not being properly supplied with blood, is not fitted for active mental labor. Such persons are lazy, or disinclined to work, either mentally or physically. It might very properly be called a diseased condition or temperament.

Children when not at school should not be compelled to continually perform some sort of labor or drudgery. They need and must have recreation and sport; let them run and jump in the open air; see how the young colt or lamb frisks and runs. It is the nature of the young to be full of life and fun; see that they have a goodly share while they are young and can enjoy it. Stop this gossip about making them pay for their raising; they were not consulted about their coming into this world to be a charge or an expense, and it is your duty to give them every advantage to develop into model men and women, not nabobs or dandies. Let them have a time for work, a time for play, a time for study and a time for rest. Never overtask your children; it is a sin and an outrage upon innocent and helpless childhood. I tell you, fathers and mothers, if you want your children to treat you well when you are aged and gray, and your second childhood is dawning upon von, set them good examples while they are children. Too many parents are compelled to do as Will Carleton has portraved to us so beautifully and pathetically, in one of his ballads.

I am almost led to believe that most of such eases are due to the treatment they get when they could not help but submit to the harsh and brutal commands of their inhuman parents. If children's affections were cultivated by kindness, and their selfish propensities restrained, almost all, even those with unfortunate organizations, might be brought to such a state of manhood and womanhood as to have due respect for their parents, and to honor and protect them in their declining years. Remember the advice given in Holy Writ: "Train up a child in the way he should go, and when he is old he will not depart from it." I will admit that many children are born with such unfortunate developments that no kind of training will make good men and women of them, but their natures can be bettered. If you wish to know why it is that parents who are, in themselves, eircumspeet and good eitizens, frequently have such wayward children, notwithstanding they have made efforts to bring them up properly, read my lectures on phrenology.

Parents, there is more responsibility upon your shoulders than most of you are aware of, and it is important to you and your posterity that you fully understand the laws of your being, in respect to your parental duties, in order that your children may not be cursed with organizations inferior to your own. The tendency to certain diseases varies in different temperaments. The motive temperament is tough, tenacious, and not predisposed to disease, but has its weak points and predispositions to certain forms of functional derangements. The predisposition of this temperament, especially of the dark variety, is to biliousness and stomach troubles, which are often favored by improper living, diet, and residing in malarial districts. Persons

of the motive temperament, especially of the dark variety, should avoid very stimulating diet, alcoholie stimulants, and smoking and chewing tobacco. They are apt to expose themselves, and take a delight in making a display of their strength, often to their detriment.

The vital temperament is the one we envy, on account of their healthy looks, rosy cheeks and good circulation; but they, too, have their predispositions to certain kinds of disease, such as congestive and inflammatory fevers, hemorrhages, apoplexy, rheumatism and acute diseases of the heart. All these diseases usually run their course rapidly. Persons of this temperament are ardent lovers, warm-hearted, mirthful, love good living and drinking and an abundance of pleasure. To restrain, where this temperament is too prominent or perverted, they must take plenty of exercise, both mental and physical, and eat diet of a non-stimulating character, and avoid alcoholic stimulants of all kinds.

Persons of the mental temperament are usually thin and pale, with great nervous excitability, and are usually looked upon as persons of poor health, when, in reality, they are more tenacious, and usually live longer than those of the vital temperament. They are generally very studious and learn rapidly, and love mental labor much more than physical labor. The diseases peculiar to such temperaments are of the nervous and spasmodic character, such as headache, neuralgia, sleeplessness, indigestion, tremors, palpitations of the heart, insanity and other nervous affections. Children of this temperament usually have convulsions when they are afflicted with fever. To restrain this temperament, it is necessary to cease study-

ing too much, take plenty of rest, sleep, and nutritious food. It is ruinous to overtask children of this temperament in their studies, and vet it is usually the ease that teachers induce such children to greater efforts, and they often fall victims to their own ambitions and the unjust urging of foolish or incompetent and ignorant teachers. I have frequently stood at the bed-side of such children when they were delirious with fever, and invariably have found them fretting over a problem in mathematics, parsing sentences in grammar, or worrying over some of their studies. They searcely ever speak of their plays; and so they die from overworked brains, poor, unfortunate children! What a shame it is that even parents and teachers do not know how to guide them aright! We frequently hear the remark: Johnny or Mamie was too elever, smart, to live. Yes, where ehildren are under the care and tuition of incompetent teachers and parents, or guardians, it is frequently the case that such children die from too elose application.

DEDUCTIONS.

Health is the natural state of all temperaments, and disease the abnormal. What is necessary to retain good health is an observance of nature's laws, and a rigid conformity to her requirements. All should possess a sufficient knowledge of their organizations, physically and mentally, to enable them to live in accordance with those laws. Health is that condition in which all of the organs of the body are working in harmony, each performing its office, normally and physiologically. When any organ fails to perform its office to the fullest extent, we soon find the indications of a pathological condition, or a departure from health. Air and physical exercise are essential to health. If

you wish your children to develop as nature intended they should, let them romp out of doors in fair weather; let them have the tonic influence of the sun's rays; do not keep them housed up; have their bed-rooms airy and cheerful; let the sun's rays penetrate them every day when he is not obscured by clouds. Too many families keep their houses like prisons, constantly closed, and the rooms darkened to keep out the rays of the great chemist and purifier, lest he might change the color of the carpet, or perchance a little dust might replace the fungoid growth of mildew, which, in many houses, is ever present, which you can smell as soon as you enter the room. Better be able to write your name in the dust upon the piano every day, than to have the dampness and mould in your rooms. People who live in dark and badly ventilated rooms are anamic, bloodless, have weak eyes and weak constitutions; they are of no force or use in life; they are liable to contract consumption or scrofula, and are susceptible to contagious diseases. The plant if deprived of the chemistry of the sun does not have its green color, or, if in a room with but one place for sunlight to enter, see how it inclines to the window whence it gets the light of the sun.

The young lady who is thin, pale and nervous; who faints from excitement, or goes into spasms when an innocent beetle is found perched upon her elothing; such poor, half-developed beings, dwarfed for want of physical culture, and the free use of their bodies in the open air, under God's shining sum—I say such beings are failures in this busy world. They can never make good wives or mothers; they are no good to themselves, and certainly they are not to any one clse. They have not benefited the world or society by having existed; life to them has been, or will be, a failure; their room

is better than their company; and yet, how common it is for parents to teach such children to shun work or exercise, thereby cutting off every avenue to physical development and mental power. Parents, see that your delieate children are not indulged in their dislike for physical exercise, and, when put to work, that they do not overwork themselves, lest the effort prove a failure and more than they can bear. The various temperaments and combinations of temperaments of each child should be understood, and their general health considered, so as to regulate each child's studies, physical exercise, diet and clothing to the various needs, in accordance with nature's laws and demands. For a treatise on the temperaments I would recommend that of D. H. Jacques, M. D.; and on physiognomy, that of S. R. Wells. On phrenology, "Phrenology Proved, Illustrated and Applied," and "Education and Self-Improvement, Complete," by O. S. Fowler; also, Combes' "System of Phrenology." He that sneers, ignores or laughs at phrenology and physiognomy, simply disbelieves in that much of the fixed laws of nature, which it were well for him if he understood and obeyed, and more especially so for the benefit of his posterity. In concluding this lecture on the temperaments, let me urge all my readers to investigate more fully phrenology and the temperaments, and obey the procreative laws, with a view of improving our race as taught by those sciences.

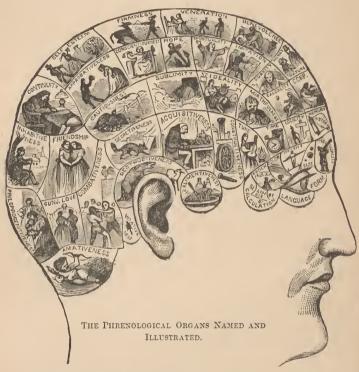
[Note.—All of the above mentioned works on phrenology and physiognomy, and the temperaments, and many not named, may be obtained from Messrs. Fowler & Wells, 753 Broadway, New York.]

PHRENOLOGY.

While there are those who are disbelievers in phrenology in every particular, the masses of reading and observing people believe in it in a general way; in fact, I may say a respectable minority believe in it as a seience; and correct in detail as far as understood. It is not claimed by its advocates that phrenology has been fully and thoroughly investigated and understood; indeed, it is yet in its infancy. It is a science that all should endeavor to get a fair understanding of in eonneetion with the temperaments. They teach man to know himself, and protect himself against himself as well, for it is well known to all that the greatest, most wily and dangerous enemy man has is himself. Phrenology teaches husband and wife to know each other; it teaches parents to understand their children, and how to suppress all vicious or evil propensities, and how to cultivate such qualities as are deficient; it teaches us how to detect the vicious and dangerous, the hypocrite and the thief.

Every young man and young girl should investigate this seience, and thus be enabled to read character from the book of nature. If such information were possessed by all, the courts would no longer be crowded with divorces, murder and arson would be less frequent, and Christianity and virtue would not have to battle so strenuously against vice and crime.

When the laws of nature are more fully understood and obeyed, with reference to procreation; when, in fact, the masses of humanity fully realize that the human animal is subject to certain fixed laws, as well as the lower animals, and that, by understanding and obeying certain laws, their progeny may be bettered,



or deteriorated by the acts of the parents, we shall see the race improved. I would impress it upon you that when the time arrives when man shall be educated fully in those fundamental principles in our natures, the dawn of man's intellectual existence will have arrived; that period, of which we read in holy writ, will have been born—that period in the cycle of time called the millennium will then be present. Yes, ladies and

gentlemen, when that time arrives it will be not only impolitie but eonsidered a crime also for children to be born into the world with vicious or immoral traits whose parents are not vicious themselves. The book of nature, God's handiwork, says: "Procreate your race in accordance with my laws, both mentally, morally and physically, and your children shall develop into men and women of great physical strength and beauty, and mental and moral ability." Jails and penitentiaries will no longer be needed, and the seaffold will be robbed of its victims and be talked of as a relie of barbarism, which it justly is, as it is not adequate punishment for the murderer, and is only adding another to the list of the murdered. What does the Bible mean where it says: "Take not that which you can not give." Can you give back life, or can you give it at all?

Great strides have been made in the past, are being, and will be made in the future in all the seiences, but I am sorry to say, but little has been done by the masses pertaining to the improvement of our race. When man has the boldness to touch upon matters pertaining to the improvement of man, or upon the laws of procreation, and the influence of the mental and physical condition of the parents at the immediate time that procreation takes place, they are denounced, or their theories are trampled upon.

Why should man frown upon any writer who wishes to bring nature's laws before the people relative to the best mode of improving our race, when to understand nature aright will assist in banishing immorality and vice from our earth? Many deny that the mental impressions of the parents at the time a being is pro-

ereated will have an influence upon their progeny, but that such is a fact is as true as the book of nature. and the very mental influences that are at work upon the minds of the parents, for good or evil, will frequently be transmitted to their children procreated under these influences. I doubt if any one who is a believer in holy writ will dare deny my assertion, for we read in the Bible of influences being exerted upon the brute creation when Laban gave Leah to Jacob for a wife when he had served seven years for Raehel; after deceiving him, Laban proposed that he serve seven years more for Rachel, and in order to pacify him, offered what he believed to be a slim chance for compensation. He told him that all the spotted cattle should be his. Jacob being better posted in nature's laws than Laban was, took advantage of this knowledge, by putting spotted rods at the bottom of the watering trough, and kept the females from the males and away from the water until they were very thirsty; in this condition he allowed them to mingle at the trough. As they could see the rods at the bottom, they conveved the impression that the water was spotted. This practice Jacob continued, so that each time the thirsty females came to the trough they saw what seemed to be a spotted fluid, which evidently made a strong impression upon them, and resulted in producing spotted eattle, to the great financial gain of Jacob. Thus you see, that as far back as Jacob's day a knowledge existed of the laws of nature in relation to the influence of mental impressions being transmitted to the offspring. Fowler eites eases where evil natures were transmitted to children when the parents were under evil influences at the time procreation took place. I have myself traced the vicious habits of children to the abandoned habits

of parents at the time the children were procreated, the unfortunate ehildren being born inferior to both parents intellectually and morally, with an increase of the selfish and animal propensities. It is of the utmost importance that all should study the laws of nature in relation to the best way to improve our race. Proereation should never be permitted to take place when the mind of one or both parents is disturbed, either through anger, sorrow or despondency; the feelings of each parent should be wrought up to the highest state of perfection of both mental and moral activity, in order that all that is vicious or immoral in either be suppressed as much as possible, and all that is good, moral and elevating be intensified. By such a course, the human race could be greatly improved, and attain to a greater state of perfection, intellectually, morally and physically. Were man to understand himself better, and obey nature's laws more strictly, ere long our world would be blessed with a superior race of beings; misery and crime would be classed as relies of a semi-savage or ignorant race.

I trust that all I have said may put you to thinking upon, and lead you to investigate, this matter, of so much importance to the future generations of this earth; it is time we should begin to look nature squarely in the face instead of evading her appeals. Nature's laws are fixed and immutable by the God who rules over all; and if so, why should false modesty or false teachings deter us from learning all we can pertaining to the laws that govern our lives, and thereby assist in shaping our destinies, for greater perfection and happiness, both here and hereafter? Why should we look upon the procreative act as being purely accidental, or the will of God? Does God will that bad men and women

should be born? When we recognize the importance of investigating and obeying nature's laws with respect to the improvement of our stock, or of utilizing electricity in disease, and in telegraphy, or in the illumination of our cities, then why not also learn and obey her laws with respect to our organizations? I presume before long all light-houses on the lakes and the mighty oceans will be made to glow with electricity, as suns, to warn all mariners as they plow the mighty deep, of the dangers that await them beneath its foaming billows.

When we look back a century and recount the wonderful discoveries made by man of nature's laws in chemistry, astronomy, and the mighty achievements of mechanism and of art, we are led to exclaim, What wondrous things God has stored away for our investigation! And when, in the race of life, we stop for a brief moment, let us give ourselves a thought, and study a little relative to the wonderful progreative laws which alone are worthy of our deepest and most earnest eonsideration. When man has polluted his blood with a constitutional disease, pathologists and nature teach us that his children must and shall have to bear the curse of this physiological sin, and if so, how can we expect, if man pollutes his mind with infamy, intrigue, villainy or murderous intent, or poisons his brain with alcoholic stimulants or tobacco, and in that state procreates a new being, that it can possibly result in anything but disaster to the unfortunate being proereated under those unfavorable eireumstances! The greatest evangelists to the human race in the future will be the philanthropists who will travel over the earth and teach how to procreate good men and women in accordance with nature's laws, and thus aid Christianity and scientists in revolutionizing the world and making humanity what the God of nature intended they should be.

There are those who denounce Phrenology and Physiognomy, and claim that they clash with religion, and yet those same persons profess to judge people and their characters by their looks, and should an acquaintance commit a felony or a murder they are ready at once to say, "I always thought he was a bad man; his looks were enough to convict any one."

If phrenology and physiognomy are simply the imaginings of foolish or speculating men, then why attempt to judge men by their looks? Does conversion transform the lines of the face, the low and reeeding forehead, and wide head with the heavy jaw, and hang-dog look, to the high and narrow-headed man or woman whose veneration and faith point heavenward as a church steeple, and whose causality, comparison and benevolence give great fullness and prominence to the forehead? No, it certainly does not. There is not the slightest doubt that the immoral and badly organized man or woman who resolves to do right and cease all evil habits, will soon change in appearance. The harsh, offensive lines will soon mellow down; the soulless and abandoned look of the eve will be replaced by one of more expression of manhood or womanhood; and while those with unevenly balaneed brains and temperaments, with a deficiency of veneration, faith and benevolence, as also the reflectives, have less ability to resist the encroachments of the world, the flesh and the devil, than those of a more fortunate organization, it nevertheless is a fact, that all who are not born idiots, can subdue their passions and evil tendencies if they have any will power whatever. That

it is easier for some to be Christians or moral men and women than others, I think no sane person will doubt; and such being the ease, we should strive to disseminate such knowledge as will enable the entire human race to fully realize that it is their duty to observe all laws of nature and of God in the procreative act, that a purer, better and more hardy race of men and women may be brought into existence, and the world made better and wiser, and Christ's aim and end accomplished by making all mankind pure and good. Then deformity, idiocy and vicionsness will be classed as eurses resulting from inexcusable ignorance of fixed laws. Consumption and scrofula will be looked upon as vices or the results of vice, or the neglect of hygienic laws, and syphilis will be classed with crime, and those contracting it constitutionally will be debarred from marrying, as they should be, for it is one of the greatest eurses known to mankind, which will be fully explained in my lecture on syphilis.

I shall not weary you further with phrenology or temperaments, but will, in closing, impress upon your minds that the mental, physical and moral conditions of both parents at the time of the procreative act has much to do with the physical, mental and moral condition of the offspring. A drunken father will or may transmit all his baser qualities to his offspring, even intensified, and the intellectual and moral faculties inferior to his own, or perhaps totally deficient. Vicious parents beget vicious children, indolent parents beget indolent children, and mothers pregnant under great terror, fear or grief for a great length of time, will bring forth weakly, delicate children. The poet [Frank Leslie's Popular Monthly] "Alfred de Mussett was the son of an old and noble race, and was born on the 11th of

December, 1810, in a street near the Hotel Cluny. He was a delieate and nervous child from birth; he writes: 'During the wars of the empire, whilst the husbands and brothers were in Germany, sad mothers brought into the world of France a sickly, pale, nervous generation. Born between two battles, educated at college, hundreds of children looked about them with a frightened glance and tried their feeble muscles.'"

Thus you see the French poet illustrates the influence of one parent bowed down with grief, whilst the other had his brain wrought up to battle, victory or death, bringing into life a nation of delicate, combative,

excitable and war-loving people.

I entreat of you to investigate phrenology for the benefit of yourselves and your children. Each human being has his or her sign, showing his or her nature, good or bad; and if you study how to read character from those three stand-points, viz.: temperaments, physiognomy and phrenological developments, you may never be deceived in people; at least but very seldom, for you can see the handwriting of nature in the face and the shape of the head of each living soul, and be enabled to form pretty correct conclusions as to the good or bad qualities of those with whom you come in contact. Each one of us shows to the man or woman posted on nature's laws, with reference to temperaments, phrenology and physiognomy, what he is. We can not hide it, however much we would like to so do. You should all understand nature in respect to those things, that you may be better qualified to know yourselves, and especially your own offspring, and discern their weak points and correct them. There is really nothing in nature of greater importance to mankind in the perpetuation of the human species; all mankind should know how to procreate or bring into the world children mentally and physically sound and well balanced.

Let us study nature's laws and obey them, and ere many generations have passed away the human race will so far outstrip the present race, that we shall be regarded as pigmies when compared with them. We are rapidly advancing in scientific discoveries and mechanical inventions, and it is high time we should study more about ourselves and the laws governing our organizations. If we obey nature's laws, our children may be born superior to us in intellectual and physical power and endurance; then with the proper culture and physical training, we may have the blessed gratification of seeing our ehildren develop into good and useful men and women, with strong physical and mental organizations, thus enabling them to fight the battles of life on the side of justice and humanity, stamping vice and crime under their feet

I tell you fathers, and mothers, and those of you who contemplate establishing a household, there is a great responsibility devolving upon you. With a proper knowledge of the laws of life, and an observance of the same, future generations of the earth may far supersede the present, in goodness of heart, mental eapacity, physical perfection and powers of endurance, while the reverse will be the result of vicious practices by parents. Drunkenness begets children who often become drunkards, or who have a great appetite for alcohol. They also beget idiots and those predisposed to insanity. And why? Because the moral, intellectual and reasoning part of the brain is stupefied with aleoholic poisons, while the animal part is stimulated and doubly active. The mental and physical condition of both parents during the immediate procreative act, often stamps the new

being for good or evil tendencies, for physical and intellectual strength or weakness. The condition and surroundings of the mother during gestation have also a mighty influence over the unborn. All prospective mothers should be treated with gentleness, eare and solieitude; their every little whim should be gratified; all harsh words suppressed, cheerful surroundings supplied when at all possible, plenty of pure air and gentle exereise, beautiful scenery, cheerful books to read, poetry and romanee of moral and elevating tendencies, together with nutritious food and a freedom from care and trouble. Husbands, I charge you to do your duty to the wives you promised to love, honor, cherish and protect, through sickness and health, and you will be blessed in having good children to stand by you in your deelining years, with an aged wife who will bless your gray hairs. Paupers beget panpers; thieves beget thieves, and murderers beget murderers. These are fixed and immutable laws. The farmer well knows if he sows bad or defective seed, he can not expect good crops; so throughout all nature. I trust I have been sufficiently plain for all to understand the importance of procreation, and I sineerely hope I have not wounded the feelings of any.

Another fact worthy of notice is the practice of females enciente (pregnant), overworking themselves, and thereby using up the vitality that should properly go to the unborn. Thus you see hundreds, aye, thousands, of children brought into existence with constitutions dwarfed, intellects blunted, and the imprint of disease and premature decay stamped upon them even before birth. Why are most men so careful of their animals and so careless or neglectful and demanding of their wives, under similar circumstances, when their

children as well as their wives must suffer for the negleet or unjust demands of the husband and father? I repeat, if you desire children physically and mentally healthy, and well developed, see that your wives are not overworked, and that their surroundings are pleasant; give them every chance your purse and situation will admit of for enjoyment and recreation; do all in your power to give them elevated hopes and desires which will carry them above the grovelling things of earth, and they will transmit to your posterity traits of goodness, ambition and physical power superior to that of their parents, which with, proper care, physieal, mental and moral culture, will grow and strengthen as they grow to manhood. Parents, see to it that your children become ornaments to society, instead of blights or curses upon it; do not wonder at their faults, or ascribe them to fate, as so many do; but study out the causes; learn the laws of nature and of God, and be vourselves, as God would have you, not forgetting the passage in Holy Writ, wherein it is written: "The sins of the father shall be visited upon the children," etc. It does not simply mean physically, but it means morally and intellectually as well. Bad seed, poor soil and eareless cultivation never brought forth good crops. Nature is alike in all things, and will not be cheated, but will pay her just debts.

PSYCHOLOGY.

THE SCIENCE OF THE SOUL, OR THE POWER ONE CAN EXERT OVER ANOTHER THROUGH MENTAL INFLUENCES.

That the mental will power of an individual can be exerted upon others, and that some possess that psychological or mesmeric power to a very much greater extent than others, either through practice, or, more properly, through greater natural, mental and physical development, we frequently see demonstrated by public speakers, who seem to exert such an influence upon their audiences that they are seemingly spell-bound by their great power, or carried away with them in their flight of oratory. When they descend into the depths of gloom and degradation, where sorrow and death hold high carnival, they are with them, viewing with mental eye the dark and slippery paths of sin, depravity and death, whilst a feeling of chilliness, akin to death, creeps stealthily upon them; and as they ascend from out those depths, higher and higher up the mountain side, where the bright rays of joy and hope shine forth, their hearers are also with them, and eontinne to ascend with them until they are sailing through space around the shining stars, and the balmy breezes seem to be wafting angelic music from the shining shore. The influence of mind upon mind is demonstrated in the ease of the sick. See what an influence the physician exerts for good upon the patient, and often the friends or nurses, by his hopeful, cheerful, beaming expressions; or the eonverse, by a morose or

despondent expression of countenance, and speaking the while in measured tones, with bated breath. One feels as if an iceberg were near the moment such a person enters his presence. Such persons are very injurious to the sick; their room is far preferable to their company; in fact, the sick should never have the society of that melancholic class.

If a minister is wanted, he should be one who has eheerfulness beaming from his eyes; whose very presence inspires you with hope, but the long-drawn melancholic, bilious, dyspeptic minister, chills the very blood in the marrow of the siek one, his cold, vacant stare, his elammy, listless stroke of the hand, his groans and sighs and solemn admonitions and prayers, send a chill to the heart of the sufferer and do much to thwart nature, drugs, and the genial physician (if such he be, and God pity the patient if he is not). Thus you can see, my readers, how important it is that the minister, the physician, the nurses and all visitors to the siek should be hopeful, eheerful and even mirthful, when proper, in order that their presence may not be detrimental to the afflieted and despondent. This eroaking, whining class of people, who so love to curse you with their presence when siek, who assume an air of astonishment or fright, and exclaim, "How bad you look!" and stare you in the face and try to look as if they were messengers from death, to warn you of his near approach, or who want to bore you by reading gloomy passages from Holy Writ, singing solemn dirges, such as "Hark! from the tombs a doleful sound," ete, or making long-drawn, sad, melaneholy prayers, thereby depressing the patient and undoing all that nature and remedies may have accomplished toward a recovery, should never be permitted to enter the presence of the sick.

Be sure your doctors, ministers and friends visiting your sick ones are hopeful and cheerful men and women; that the psychological influence they exert will be inspiring and hopeful, and not depressing. Whispering should never be indulged in in the presence of the sick; either speak aloud that the sick may hear, or, if not appropriate, retire to another room; never ask the physician's opinion in the presence of the patient, and do not express an unfavorable opinion yourself in the sick room; do not leave the patient entirely alone when the physician departs, to question him of his or her condition, or prospects of recovery, and especially do not take the physician in one corner of the room and question him or her in a low tone of voice; in short, a physician should never be solicited to give his or her opinion of a ease in the presence of a sick person; it is a very foolish and injudicious practice, and is fraught with dauger to the siek. The magnetic force or power which one may exert over another is frequently very great, and especially is it so with the Thus you can see the importance of exerting this magnetic power for good instead of evil. How frequently you feel the magnetic influence in the shake of the hands, where their very touch inspires you with hope or depresses you. I doubt not but that most of my readers have experienced the peculiar incomprehensible power which is felt when a person is near, and yet you may not have heard their approaching footsteps, or have seen any one, but still you feel the presence of another, and would look around to discover a friend or a child stealthily coming upon you. I so frequently hear of such occurrences that I am led to

believe them to be quite common. This power or influence I believe is the magnetic power in us extending to others, as a magnet will throw out its attractive power for steel or iron. This may be termed psychical projection; each of us having a certain circuit or influence in proportion to the force within us, which may exert its influence upon others coming within our circle of power to a greater or less extent, in proportion as we are strong or weak in this magnetic force, even if we make no effort at psychical projection, or the direct application of this magnetic force.

The electro-psychological and magnetic force may also have its influence upon the fœtus in utero, and, by the mother being placed under proper influences, with pleasant surroundings, the human family may be greatly benefited, by producing a more intellectual and beautiful race of men and women.

The law of impressions, which has much to do in nature, is also worthy of consideration. Through the influence of impressions on the mind of a pregnant female, the fætus (child), may be influenced for good or evil. The mind of the mother acting with great force upon some particular thing, may influence the fœtus, and it may be marked, crippled or deformed. All things should be favorable, to keep the mind of females free from eare, anger, terror, or a longing for food or drink of any kind whilst they are enciente-pregnant. Any great emotional influence may result in great injury to the unborn child. Reference has been made in another lecture to the influence the wars in France exerted over the children procreated and born during those exciting times. I might lecture to you at great length upon the influence of mind over mind and matter, and vet I trust what little I have said may enlighten you sufficiently to be of some benefit to you in your walks through life.

In conclusion, I will eall your attention to the mode of magnetizing or mesmerizing individuals, as described by J. B. Dodds, or, as he terms it, electrically and psychologically controlled. "Take the individual by the hand as if shaking hands, and press your thumb with moderate force upon the Ulnar nerve, which spreads its branches to the ring and little finger of the hand. The pressure should be nearly an inch above the knuckles, and in range of the ring finger; lay the ball of the thumb flat and partially crosswise, so as to cover the minute branches of this nerve of motion and sensation. The pressure, though firm, should not be so great as to produce pain, or the least uneasiness to the subject. You then request him to look you square in the eyes, and continue to look him in the eyes for half a minute, at the same time keeping up the pressure with your thumb. During this time you must feel a firm determination to mesmerize your subject; you then request him to close his eyes, and brush gently downward over them, with your fingers several times; then put your hand on the top of his head and press on the organ of individuality with your thumb, which lies just at the top of the forehead above comparison; press gently downward, still continuing the pressure with the thumb of the right hand on the ring and little finger; then tell him in a very positive manner, You can not open your eyes! You must, of eourse, exereise all the will-power and concentration of it von possess, to prevent him opening his eyes, or psychologically to control him. If he opens his eyes you may repeat three or four times in the same manner; if he stand in the electro position relative to yourself, as to

impressions, you can not control him. Another method is, to press on the median nerve, with the palm upward, by placing your thumb near the root of his thumb and close to the wrist, and proceed as before directed. If you succeed in closing the subject's eves, you ean then command him to walk and tell him he can not stop; or command him to be seated and then tell him he can not rise; or place his hand on the top of his head and tell him he can not remove it. When you have thus controlled him, he is in the electrical state. You will next proceed to exercise mental impressions. If he be fully under your control you can make him believe almost anything you will. You can tell him a friend who may be present is a great enemy of his, and command him to put him out, and he will at once proceed to execute your order, believing it is so; or make him believe his mother, sister or brother has just arrived, whom he has not seen for years, and rejoice over the happy reunion and embrace them affectionately. You can give him water to drink and tell him it is whisky or vinegar, and he will act as if it was really the case. All these and many others may be willed by the mesmerizer and the subject be sufficiently controlled to believe it to be so. When you can thus control individuals, they are in the electro-psychological state; but as there is only about one in twentyfive that are naturally in this state, to enable you to control them, you must bring those who are not into it before you can partially or fully control them. This may be done in the following way: Take a piece of sheet zinc the size of an old fashioned cent, but thicker, and take a ten-eent silver coin and rivet them together with copper wire; place this in the palm of his or her hand, with the silver dime up, and request it to be

brought within a foot of the eyes, and continue to look at it for at least twenty minutes without looking away; he must remain perfectly motionless, not moving a particle save to wink; all should be perfectly quiet; should the eves be inclined to close, it should be permitted; after twenty minutes or half an hour, relieve each one of his or her position and collect your coin. and try as directed to magnetize them, one at a time. Should you fail, the operation of looking at the coin must be repeated. They may soon be brought into the electro-psychological state, by one or two sittings, and others may require one hundred or more of half an hour each, every one, two or three days. The galvanic battery may also be used with a mild current in this way: Twenty or thirty may join hands, at each extreme; the persons will take hold of the handles and all look intently at the battery for half an hour at each sitting, and after each sitting you press upon the median nerve, and proceed as directed to influence them. In making the downward passes throw the hands out as you bring them up again, and when they are once under the influence, and you wish to awake them, you reverse your passes by bringing your hands upward and close to the head, and throw them out as you bring them down. Then you can experiment relative to the power of mind over mind and matter, through the aid of electro-magnetism." Upon the same principle is the unborn babe often impressed and injured or benefited through the mind of the mother.

Such being the fact, it will be seen how very important it is to educate our daughters and give them equal chances with our sons to develop them, both mentally and physically, to the very fullest extent of their capacities, that they may not only enjoy all the rights and privileges of their fathers, brothers and husbands, which they most assuredly should, but also that they may be better fitted physically, mentally and psychologically to procreate and educate their children; for, as a rule, all men or women of ability have had mothers of intellectual power and force of character, even if they were not educated. In short, an idiotic or silly woman never brought forth a son or daughter who became noted for brilliancy or intellectual power; it is not in accord with nature's laws and requirements.

I trust my readers may give the subject of psychology sufficient thought and investigation to enable them to understand many freaks of nature which are to the masses of humanity incomprehensible, and which tend to foster superstition and a belief in witcheraft, thus giving the charlatan, the fortune teller, and all classes of located and traveling impostors and charm doctors a chance to ply their fraudulent practices upon the unwary and superstitious, and extort money from them upon the plea of possessing supernatural knowledge. Everything in nature is governed by fixed laws; and all things strange and mysterious are simply so by reason of our ignorance of the laws that govern them. If we wish to be wise we must be studious.

"Knowledge and fame are gained not by surprise, He that would win, must labor for the prize. 'Tis thus the youth in lisping A, B, C, Attains at length a master's high degree."

For a complete study of mesmerism and psychology, read the Library of Mesmerism, published by Fowler & Wells, 753 Broadway, New York.

HOME.

Home should be, of all places, the most sacred; the place where peace and happiness should reign supreme; the place where broils and strife should never enter; the place for solace and comfort, where, after the day of mental and physical labor is past, we can gather our loved ones around us and bask in the sunshine of joy and happiness. These we should prepare through love and kindness to stand by us during the stormy days of life, and watch over us in the hour of death, when the battle between the vital forces and disease is waging. Life is brief at best, and if we do not make our homes havens of rest upon earth, life then. indeed, becomes a farce. A writer has said, "Life is but a dream; the future is the reality." Life is, indeed, a mysterious, tempestuous journey, from the eradle to the grave and eternity. Robert G. Ingersoll says: "Life is a shadowy, strange and winding road, on which we travel for a little way—a few, short steps just from the eradle, with its lullaby of love, to the low and quiet wayside inn, where the only salutation isgood night." The poet has said, "'Tis not all of life to live, nor all of death to die." Let the future have in store for us what it may, it is our duty to the God of nature, to our family, the human race, and ourselves, to make as great a success of this life as we possibly can, and watch the flitting moments and utilize them to the best purpose and with as much care as if they were the last to us on earth, for it will be but a few short years at best till we will have to take our departure to "the unknown land."

THE UNKNOWN LAND.

O land unknown! Beyond our mortal sight, Wrapt round with gloomy shadows of the night, Our spirits dread, yet long to win their flight To the mysterious shores.

O land unknown! We strain our eager eye; Into the dark we send our pleading cry; We call in vain, no voices make reply From the mysterious shores.

O land unknown! A never-ending train
In stern procession from these realms of pain,
Moves slowly on but comes not back again
From thy mysterious shores.

O land unknown! Art thou far off or near? We only know our loved ones disappear, And the old voices we no more can hear From thy mysterious shores.

O land unknown! By the dividing stream
We stand and gaze and sometimes fondly dream
The clouds will part and yield one transient gleam,
Of thy mysterious shores.

O land unknown! That day of days draws nigh, Which shall unlock this hidden mystery And bid our dreading, longing spirits fly To thy mysterious shores.

-Rev. I. N. Tarbox, D. D.

In order to be perfectly happy it is necessary that we have a home, and that we make it the garden spot of our existence. We must not, in the race of life, whilst striving for fame, honor or wealth, neglect our homes and our loved ones; but rather gather them together each night, as the hen gathers her brood, and spread over and around them our wings of love, affection and admiration,

and thereby cultivate and develop all the better faculties, such as benevolence, veneration, faith, friendship and firmness, and all of the reflectives and perceptives. Benevolence, to enable us to do good and be liberal in our conduct toward all mankind, thereby avoiding bigotry or tyranny; veneration, to respect all that is good, and with benevolence, pity all that is bad; faith, to believe in the goodness of God, nature and man, and be ever ready to do right; friendship, to enable us to treat all mankind kindly and manfully; firmness, to enable us to adhere to friends, loved ones, and all good resolves, and with large human nature, causality, comparison and the perceptives, enable us to observe and know the good from the bad, and thereby protect ourselves, our families and our homes from evil and designing men, and defend our children from the destroyer's hand. Our homes should be adorned with brie-a-brae and choice pictures to refine the tastes and please the mind through the eve. Our shelves or libraries should contain choice, entertaining and elevating literature upon which to feast and learn during our leisure hours; we should read to our children short extracts from time to time, such as they are capable of comprehending; we should also have harmless games, such as drafts (chequers), chess and other harmless amusements for recreation and enjoyment. Indeed, we should make home so pleasant that our children would feel no desire to go elsewhere for pleasure or amusement. The wife and mother should make herself so loving, attractive, kind and cheerful, as to give no honorable man a desire or excuse to pass his evenings at the elub room, ball room or lodge room; that he may fully realize that the best place to lodge is at home. I have been personally acquainted with men

who were members of so many lodges, and were so very devoted to them, as to be out every night of the week, paying honor and devotion to some secret order, or the initiation of some new candidate, who was desirous of learning some of the mysterious usages and traditions of the dark ages, when they drank blood from dead men's skulls or inscribed their names with blood beneath their sacred obligations. Men who love lodges so well that they never lodge at home till the wee sma' hours, should never marry and make a wife miserable, and negleet her and their children.

THE JINERS.

THE HUSBAND WHO JOINED ALL THE SECRET ORDERS.
[Modern Argo.]

She was about forty-five years old, well dressed, had black hair, rather thin and tinged with gray, and eyes in which gleamed the fires of a determination not easily balked. She walked into Major Huse's office, in Patten's block, and requested a private interview, and, having obtained it, and satisfied herself that the law students were not listening at the key hole, said slowly, solemnly and impressively: "I want a divorce." "What for? I supposed you had one of the best of husbands," said the Major.

I s'pose that's what everybody thinks, but if they knew what I've suffered in ten years, they'd wonder I hadn't scalded him long ago. I ought to, but for the sake of the young ones I've borne it and said nothing. I've told him, though, what he might depend on, and now the time's come. I won't stand it, young ones or no young ones; I'll have a divorce, and if the neighbors want to blab themselves hoarse about it, let 'em. I won't stand it another day."

"But what's the matter? Don't your husband provide for you? Don't he treat you kindly?" pursued the lawyer.

"We get victuals enough, and I don't know but he's as true and kind as most men, and he's never knocked none of us down. I wish he had, then I'd get him into jail, and know where he was nights," retorted the woman.

"Then what's your complaint against your husband?"
"Well, if you must know, he's one of them plaguey jiners."

"A what?"

"A jiner—one of them pesky fools that's always jining something. There ean't nothing come along that's dark and sly and hidden, but he'll jine it. If anybody should get up a society to burn his house down, he'd jine it just as soon as he could get in, and if he had to pay for it he'd go all the suddener. We hadn't been married more'n two months before he jined the Know Nothin's. We lived on a farm then, and every Saturday night he'd come tarin' in before supper, grab a fistful of nut-eakes and go off gnawin' 'em, and that's the last I'd see of him till mornin'. And every other night he'd roll and tumble in his bed, and holler in his sleep, 'Put none but Americans on guard, George Washington,' and rainy days he would go out in the corn-barn and jab at a picture of the Pope with an old bagnet that was there. I ought to put my foot down then, but he fooled me so with his lies about the Pope's coming to make all the Yankee girls marry Irishmen, and to eat up all the babies that warn't born with a cross on their foreheads, that I let him go on and encouraged him in it. Then he jined the Masons; p'raps you know what them be, but I don't, e'ept they think they're the sam'e kind of critters that built Solomon's Temple and took care of his concubines, and of all the darned nonsense and gab about worshipful masters, and square and compasses and sich like as we had in our house for the next six months you never see the beat. And he's never outgrowed it nuther. What do you think of a man, 'Squire, that 'll dress hisself into white apron 'bout big enough for a monkey's bib, and go marching up and down and making motions and talking the foolishist lingo at a picture of George Washington in a green jacket and a truss on his stomach? ain't he a looneytick? Well, that's my Sam, and I've stood it as long as I'm agoing to. The next lunge the fool made was into the Odd Fellows. I made it warm for him when he came home and told me he'd jined them, but he kinder pacified me by telling me they had a sort of branch show that took in women, and he'd get me in as soon as he found out how to do it. Well, one night he came home and said I'd been proposed and somebody had black-balled me: did it hisself, of course; didn't want me around knowing to his goings on, of course he didn't, and I told him so. Then he jined the Sons of Malter; didn't say nothing to me about it, but sneaked off one night pretending he'd got to sit up with a sick Odd Fellow, and I'd never found it out, only he came home looking like a man that had been run through a thrashing machine, and I wouldn't do a thing for him till he owned up. And so it's gone from bad to wuss, and from wuss to wusser, jinin' this and that and t'other till he's Worship Minister of the Masons, and Goddess of Hope of the Odd Fellows, and Sword Swallower of the Finnegans, and Virgin Cerus of the Grange, and Grand Mogul of the Sons of Indolence, and Two-edged Tomahawk of the United Order of Black Men, and Talebearer of the Mereiful Manikins, and Skipper of the Guild Caratrine Columbus, and Big Wizard of the Arabian Knights, and Pledge-passer of the Reform Club, and Chief Bulger of the Irish Mechanics, and Purse Keeper of the Order of the Canadian Conscience, and Doubled Barreled Dietator of the Knights of the Brass Circles, and Standard Bearer of the Royal Archangels, and Sublime Port of the Onion League, and Chambermaid of the Celestial Cherubs, and Puissant Potentate of the Petrified Pig Stickers, and the Lord only knows what else. I've borne it and borne it, hoping he'd get 'em all jined after a while, but 'taint no use, and when he'd got into a new one, and been made Grand Guide of the Nights of Horror, I told him I'd quit, and I will."

Here the Major interrupted, saying: "Well, your husband is pretty well initiated, that's a fact, but the court will hardly call that sufficient cause for divorce. The most of the societies you mentioned are composed of honorable men and have excellent reputations. Many of them, though called lodges, are relief associations and mutual insurance companies, which, if your husband should die, would take care of you, and would not

see you suffer if you were siek."

"See me suffer when I'm siek! Take care of me when he's dead! Well, I guess not; I can take care of myself when he's dead, and if I can't, I can get another, thar's plenty of 'em, and they need not bother themselves when I'm siek, nuther. If I want to be siek and suffer its none of their business, especially after all they have made me suffer when I've not been siek and all through their earrying on, and you needn't try to make believe it's all right either. I know what

it is to live with a man that jines so many lodges that he don't never lodge at home, and signs his name, yours truly, Sam Smith, M. M., I. O. O. F.; K. O. B., K. of P.; P. of H., R. A. H.; I. I. P., K. of X.; N. C., L. E. T.; H. E., R. R. J.; P. H., Y. Z., etc.

"Oh! that's harmless amusement," remarked Mr. Huse.

She looked him square in the eye, and said, "I believe you are a jiner yourself."

He admitted he was, to a certain extent.

She arose and said, "I wouldn't have thought it, a man like you, chairman of a Sabbath-school and superintendent of the Republicans! Its enough to make a woman take pisen. But I don't want anything of you. I want a lawyer that don't belong to nobody or nothin'," and she bolted out of the office and inquired where Capt. Patten kept.

I trust my readers may not take umbrage at my sally upon secret orders, for I am sure some good results from their protective influence, and yet, I must urge heads of families not to allow lodges to take precedence over the home circle. I must also warn wives against making home unpleasant for their husbands and children; many wives drive their husbands and children away from home through their bad tempers or filthy habits and dirty houses. "I do not wonder," says Rev. Myron W. Reed, "that some children prefer the street, and that some men never come home until everything else is elosed up." Poor creatures! home to them is a hell upon earth, a place to be dreaded and shunned, until the so-ealled wife and mother has suecumbed to the demands of nature, and is sileneed in sleep; then the unfortunate husband and children will sneak home, if so it may be called, and slip in at the

back door or through the window, boots or shoes in hand, and almost breathless, lie away to their couches. A home that is presided over by such a wife and mother is a faree and a delusion, and it is no wonder that in such families men fall into drink, and the children grow up to be thieves, murderers and prostitutes. Poor children, it were better they had never been born. Such unions are curses to every community and people on earth, with bad men and women, whose fiendish acts would make angels weep. It is time theologians, the clergy and humanitarians bestir themselves and aid physiologists and phrenologists in teaching man how to procreate as well as educate the human race; for evil or vicious parents procreate vicious children, and, with bad home influences, stamp infamy upon them, which will curse them and all with whom they come in contact. I beg pardon for the repetitions which occur in this work upon the procreative laws. I deem it of so much importance to the well being of the future generations of the earth that I can not refrain from recurring to it wherever I can make it impressive, and by so doing fix this matter of such grave import indelibly upon your memory.

Husbands, you should not expect too much of your wives; you should not look upon that being whom you professed to love so much before marriage as a servant or beast of burden, but treat her as your equal in all things, and be proud to make her such. No man should marry a girl that he can not respect and take with him into society. The man who is ashamed of his wife will make home a place of misery instead of pleasure, and his children will learn to disrespect their mother, and their natures will become ruined in youth. A child that does not respect the mother can be of but

little force in life; if a man, he will not respect his wife; if a girl, she will not have due respect for a husband; of course the case of vicious or brutal mothers does not apply here. It is really astounding how much more some men love money than they do their wives or children; they even permit their little ones to lie sick for days in great pain rather than spend a few dollars to relieve them of suffering, and aid nature in restoring them to health.

A farmer lost a good and devoted wife. In lamenting his loss he remarked that he would rather have lost his best horse. Think what a monster a man must be that can put a market value upon his wife, the mother of his children, classing her as a beast of burden. Had he lost a valuable horse his lamentations would have been sincere, for it would have been a loss of so many dollars, but the loss of the wife is simply the loss of what it costs to give her a cheap burial, and being enabled to look up a younger one atones for all the expense. Some men lack constancy, and love a change. To them the loss of a wife is but a holiday happening. How very careful most men are of their horses, at certain times; they handle them so tenderly or keep them from work. How do these men treat their wives? Do they have all this forethought and kind consideration for the wife when she is enciente pregnant? Is she spared? Oh! no. She has her daily routine of toil and eares, working for husband and ehildren. The burdens of housework are many and great; housework, if thoroughly done, taxes the museles, nerves and brain. But her condition does not save her; full well she knows if she falls in the harness another will soon be found to put it on and go on with the work where she left off, or perchance take

life easy on what her predecessor largely assisted in accumulating by years of unremitting toil and saving. Do these loving husbands ever surprise their slaves who, in mockery, they call wives, with the proffer of help? No; it is cheaper to get another wife when the old one drops with her shoulder to the wheel, for she is worn out by her hard work, and no longer answers his purpose, as a wife. He again longs for one full of animal life and vigor. Foolish woman, why did she not retain her vigor, for by so doing she might have retained his love and admiration. Poor unfortunates, what outrages are frequently perpetrated upon them under the Christian name of wife, when they are broken down physically and mentally by overwork, care of children and sleepless nights. They are too often compelled to submit to demands from vigorous and not overworked husbands, which act is little better in the sight of God and nature than rape; and so toil and beastly outrage go hand in hand against her until she falls to her knees in pain. Great God! how can such a state of affairs, such barbarities exist amongst men? Gold in preference to the comfort and happiness of the-what should be the-nearest and dearest friend on earth! I doubt not you have heard of the Irishman's lament over the eorpse of his wife. "Faix, Bridget, ye's 'ave gone now, and I'll miss ye's much, for ye's was a good ould divil to work."

Young ladies, try to marry persons suited to you; let no idle fancies carry you astray; more lives have been blasted by improper marriages than all else. To-day you are free and happy; to-morrow you perhaps are married, and your life is commencing to drift upon the breakers of abuse, sorrow, and perhaps disgrace or premature death. Young ladies, when you

receive an offer of marriage, whether the man be young or old, endeavor to learn something of his family history; and do not, as you value a peaceful and happy future, marry any man in whose family are diseased inmates. By this I mean hereditary or acquired blood diseases. Drunkenness, which is the curse of many otherwise happy homes, can be transmitted. Do any of you blooming young ladies desire to become a drunkard's wife? Do you want to see the beloved face losing its finer qualities, coarsening day by day? Do you desire to look into the loved face and be cheered by promises only given to be broken? to watch hour after hour for his coming; to listen, with bated breath, for his footsteps, only to hear them go by on the other side of the street, with questionable associates; to watch the dawn steal upon the sky, bringing splendor that mocks the wretched heart; to long for death and find it not; to see your children cursed with a taint a drunken father bestows? This, young ladies, is what it is to be a drunkard's wife. The story is old, and is so well known and so often repeated, it needs no further embellishing by my pen. Beware of becoming a drunkard's wife, for it almost always leaves its blight upon the offspring.

Insanity, cancer, indigestion, asthma, rheumatism, epilepsy, early loss of sight, these organic diseases and defects are handed down from parent to child. Even as the names and facial lineaments are conveyed from sire to son, traits and idiosyncrasics of ancestors are transmitted to their posterity. Vicious propensities become a heritage of woe—a demoralizing taint that corrupts the spring of virtue. We often notice the precocious depravity of children, the base instinct which impels them to ruin; also, cruelty, dishonesty,

lying, cowardice, violence of temper, and other vices; as also these virtues, gentleness, goodness, bravery, etc. In short, these vices and virtues are to a great extent inherited. By eareful home training many of these bad traits can be overcome or suppressed. But the worst possibly cruelty to children of a wayward nature is to allow them their own way, because that way will be productive of bad results.

Do not allow your children to indulge in outbreaks of temper. Many men and women can trace their bad and violent tempers back to childhood, when their outbursts of temper were laughed at by parents and friends, and when rebellious at school were sanctioned at home in their vulgar display of temper. A bad temper should be suppressed, not cultivated. It breeds a train of evils; a cruel disposition, early decay, gloom, distrust, envy, meanness and hate, and drives friends before it like chaff before the wind. As soon as a child learns to speak, teach it self-control and politeness. Children need a firm hand to guide their wavering dispositions aright. Teach them to ask for what is needed in a respectful manner. Let "please" preface each request; when granted, let "thank you" fall from the lips. This is no difficult lesson to teach children, and it is as gracious as needful. If this were practiced by the parents it would be an easy lesson for the children, but it is often the reverse. The husband aeeepts a kindness at the hands of the wife, or vice versa, as a matter of eourse. In such an atmosphere it will prove a hard task to teach children good and polite manners, and now and then the parents will wonder why their children have not such pleasant and courteous ways as their neighbors' children, never turning their eyes upon their own share in making the children

what they are by their own example. Mothers, never permit your daughters to keep the society of men who are not honorable or with whom you are not acquainted. Permit no man, old or young, to keep the society of your daughters who is shy of making your acquaintance, or who can not look you square in the face; and particularly a man who lives by his wits, or who, like Dickens' Micawber, is "waiting for something to turn up" by which he can make a raise; never be ashamed to have your daughter keep the company of ambitious working men; it were better for your daughters to marry young men, be they ever so poor, if they are honest and industrious, than to marry the fashionable fops who are too often licentious and dishonest, with no kind of respect for virtue. Never permit your daughters to keep the society of fast young men or those beneath them, intellectually or socially. Ladies, never keep the society of any man you are afraid of or ashamed to introduce to your parents, sisters or brothers; and never entertain young gentlemen later than ten or eleven o'eloek P. M. Never make engagements with young men to meet them secretly. A young man that will not call at your home for you and ask your parents if you can accompany him to any place of amusement. is not a gentleman, but is a dangerous man to accompany you anywhere. Remember, as the customs of society place you, you have all to lose, from imprudence; young men nothing; imprudent acts or remarks often brand you in the eyes of the public as bad, even though you be as pure as snow. Young men, do not fall into the vulgar and sinful habit of speaking lightly of the female sex, or of lounging on street corners and staring at them; remember your mothers are

women, and that none but blackgnards are guilty of such outrages upon common decency.

Many thousands of the human family go to premature graves or the insane asylums from the results of secret vices. Mothers, you should be ever on the alert that your innocent children do not fall into practices that will destroy them; could you but know the thousands that die annually with consumption, dyspepsia and nervous diseases, which were brought about by those practices, you would feel it your duty to watch and advise your children to shan such evils as they would the society of the vicious and the wicked. Many of the young girls of the present day are on the downward road to ruin and early death; their vouthful minds have been poisoned by promiseuous associations, late hours, and bad literature. Obseene and flash literature is so productive of evil to the young, that I shall speak plainly of it in this book, as well as of the secret vice, which has become a common thing for the vouth of both sexes at the present day. The fewest number of parents will believe that their apparently innocent children are guilty of this pernicious practice until it begins to tell upon their health. If they hear of it from others they believe the story false, and only awaken to the trnth when perhaps too late; all parents should be on their guard and save their children from this monstrous evil, which weakens and destroys the physical system and the memory. It eauses diseases of the nervous system or brain; it eauses insanity; it will destroy all good and moral traits; it will ruin both body and soul. The habit is acquired sometimes at school, and is taught by the older and more vicious to the younger children; as the habit gains the ascendancy over the senses, the victim oftener desires to be alone, and will shun the company of the opposite sex. The eyes become dull; the lids are sometimes sore or swollen; bluish rings appear under the eyes; inability to study, and finally the health and strength give way. Behold with terror the devastation which follows: the solitary vice, masturbation or onanism, produces blindness, stupidity, spinal diseases, emaciation, loss of memory, involuntary seminal emissions, loss of energy and loss of spirits, idiocy and sore eyes. These and many more are the results of this too common practice. Break it up at once; if you can not accomplish it in any other way, never allow the victim to be alone, either by day or night.

If it be a daughter, the mother must question and watch and warn her of the ruin before her if she continues the habit. Make of her a companion, enter into her pleasures, be they ever so frivolous and ehildish, buy her good books and read them to her, and ask her in turn to read to you, and so weed out the festering seeds of vice. If it be a son who has contracted the habit, let the father take the matter in hand, and point out to him the evil results which will bring ruin, disgrace and early death. If this does not accomplish a reformation, send for your family physician and lay the ease before him. It is very easily detected with a little care on the part of the parents, if a proper effort is made by watching the linen and bedding. Mothers and fathers, throw away false modesty and sit down and give your ehildren such counsel as will save them from premature decay, the mad-house and death. I trust what little I have said may be of sufficient warning to you to watch your children, and especially your servants or nurses, that they do not lead them into bad

practices; and let me state just here, that children are often taught evil practices by nurses to quiet them, and as often as the little ones become fretful, they are again instructed in those practices. I trust you will also advise your sons of the death-dealing, blood-poisoning and soul-destroying venereal maladies. Syphilis poisons the blood, causes copper-colored eruptions and ulcers upon the skin. In the third stage it attacks the bones and eats them up. The sufferer has very severe rheumatic pains at night, and eventually rots and dies. This disease not only destroys the sufferer, but its death-dealing poisor is transmitted to posterity. "The sins of the father shall be visited upon the children, even to the third and fourth generations," and it does not stop here, but the very blood flowing from the mother to the fœtus, and back to the mother, carries with it the poison to the innocent mother to contaminate her blood and start her on the road to deeay, suffering and premature death. I tell you, ladies, it is one of the blights of our nation; it is a greater eurse than all else in our land. Teach your children to shun the social evil as they would a poisonous viper; teach them to grow up pure and good men and women, that their days may be long and full of happiness. "Eternal vigilance is the price of liberty," and to your children virtue, health and happiness. Be eareful as to whom your daughters marry. See that they are not driving nails in their coffins by marrying young men diseased, broken down in health, spiritless, languid, nervous, irritable, with no life or animation. See that they are full of life and vigor, ambitious, energetie, and walk with an elastic step, showing that they are physically well developed. Blood will tell, in race as well as disease. See to it then that your family tree

has not ingrafted into it seions from bad stock, whether rich or poor, it matters not. Let the blue blood of virtue, morality, temperance, ambition, firmness, and, in fact, all that goes to make up good men, be preferable to gold; let your aspirations in life be upward and onward, and believe with the late lamented poet Longfellow, that—

"Lives of great men oft reminds us,
We can make our lives sublime,
And in passing, leave behind us
Footprints on the sands of time."

All vulgar remarks or stories, or profane words, if indulged in at all, should be avoided about home or in the presence of children; and profanity should not be tolerated in your children. Teach them to look upon profanity and vulgarity as degrading, and but little better than theft or drunkenness. Be ever on the alert, parents, to enlivate all that is good and suppress all that is bad, ever remembering that the future weal or woe of your children depends almost entirely upon your own conduct, both before and after their birth; and, if so, see to it that you prepare the soil properly before you sow the seed, if you desire to have good erops; then follow with proper cultivation and firmness, and you will materially aid in peopling the world with better men and women. Never give your children too much freedom on the streets, and, by all means, never permit them out after night-fall, unless well guarded. The public streets and highways are the schools for their destruction, and the parents who permit it will repent it in sorrow. Do not allow your daughters to flirt, or keep the company of any with whom you are not well aequainted, or do not know to be good. Young ladies, never make or accept the

acquaintance of young men unless properly and formally introduced to you by one in whom you have perfect confidence. Do not put much confidence in the masses of young or old men; watch them, and be ever on your guard; never give them any chance to abuse your confidence; trust in God, be firm in doing right, and watch all mankind. Never accompany any man to any place without first asking advice and permission of your parents. Remember, they alone are deeply anxious for your purity and happiness. The girl or boy who will not obey their parents—if good ones—will sooner or later come to shame and sorrow. Shun all evil acquaintances; be guarded in conversation; avoid the wily and oily-tongned flatterers; make but few associates, and be sure they are good ones.

Mothers, be sure you teach, or have your daughters taught, some better occupation than husband-hunting. Do not allow your children too much liberty, and yet do not become tyrants. Too many children are made the victims of tyranny at home and at school. It produces no good, but incalculable evil, often laying the corner-stone of a crucl disposition. Tyranny at home or at our institutes of learning breeds deceit, lying, hatred, suspicion, cunning and deceptive arts, and produces a miserable, morbid effect upon the disposition. Beware, then, how you form their inclinations and aversions. Help, encourage, restrain, condemn and praise, but play the tyrant never.

American girls are left too much to depend upon their own chosen resources for pleasure, and we find them strolling about the streets with young fellows until a late hour at night, the foolish mothers the while depending upon their daughters' innocence and selfrespect as a safe-guard against temptation. No words of warning are given them, and the quicksands of youthful folly may bury deep and forever all hope of future joy and perfect happiness. Educate your daughters as well as sons to be consistent, truthful and practical, so that when they take upon themselves the duties of wifehood their husbands may find in them a source of comfort, and may entrust their honor and finances in their hands, with a feeling of perfect security. If your daughters feel that marriage is not the sole end and aim of existence, and that they have no special talent for the kitchen, fancy work or accomplishments, but display an ambition and taste for pursuits which are filled almost exclusively by men, allow them to test their ability in the ealling they prefer, for some of our greatest and best women have been those given to other pursuits than being the living eeho of a husband; or, in other words, the eonsolers or tormentors who preside over their homes, take eare of their children, and accept with meekness or fury their uncertain temper, which they keep too often for home use, for the sole pleasure very often of having a place to eat and sleep, with dry goods thrown in, rather than go out into the world and meet its frowns. This might have been the fate of such great and noble women as Susan B. Anthony, Clara Barton, Elizabeth Blackwell, Emily Faithful, Florence Nightingale, Charlotte Cushman, Marie Mitchell, Rosa Bonheur and Phæbe E. Cozzens. These are but a few of the number whose whole lives have been given to usefulness, deeds of love, kindness and honor, and so have proved an inealculable benefit and help to the human race. What Susan B. Anthony has alone done to make the world better, and, I am sure, wiser; what she has done for the emancipation and elevation of the female sex.

in particular, will live in the hearts and minds of future generations as a monument of glory to her name long after her detractors and revilers have gone to dust and been forgotten. The emancipation of women is near; you can see it on every hand; you can see it in the opening of many institutes of learning; in the opening of the doors of medical and law colleges; in the elevation of women to high places of honor and trust. Many of our noblest and foremost men in Congress, the legislatures and the pulpits are battling strenuously in the eause. The press throughout the country has shaken off the apathy, indifference or prejudice that has heretofore controlled it, and the great and glorious cause of woman's emancipation is being placed before the people, not with contempt or ridicule, but with an carnestness and zeal which will not down, but win success. And whilst I have mentioned the names of a few of the noble, self-sacrificing women of ability, who have not assumed the responsibilities of wife and mother, let me mention the noble bearing and good deeds of a few who know full well what it is to suffer and endure what only wives and mothers ever do or ean, and yet, despite the jealous croakers who cry fie, fie, or shame upon the woman who dare assert their rights, or speak in public in behalf of the freedom and equal rights of women, with their male protectors. There is a class who have and are most nobly and honorably filling the position of wives and mothers, who have repeatedly mounted the rostrum and raised their voices to man and heaven in behalf of their sex, and eivil and religious liberty, or by their pens volumes have been written in defense of their rights, which are rapidly revolutionizing the world, and converting all just and liberal minded men

to a belief in the justice of equality—the elective franchise to all mankind, regardless of sex, race, color or condition of servitude, admitting that each one should rise or fall, according to merit or demerit. Many such noble women live, or have lived in our day, a few of whose names I will mention: Mrs. Lucy Stowe, Mrs. Elizabeth Cady Stanton, Mrs. Julia Ward Howe, Mrs. Lucretia Mott, Mrs. Florence M. Adkinson, Mrs. Amy E. Dunn, Mrs. May W. Sewell, Dr. Mary F. Thomas, Mrs. Mary E. Haggart, Miss Helen Foster, Miss Charlotte Bronte, Mrs. Harriet Beecher Stowe, Mrs. Belva A. Loekwood, Mrs. Helen Gouger, Mrs. Mary E. Simmons, and so I might add names ad infinitum of talented and noble women who are or have been doctors, authors, editors, lecturers, poets, and even soldiers, as Joan of Arc was, many of whom have been or are wives and mothers, and whom any man might be proud to call wife, or any child to call mother. Even in the last few days a committee in Congress reported favorably to a change in the Constitution of the United States in favor of women.

Had women possessed equal rights with men, polygamy could never have gained a footing on American soil, and as woman's rights have advanced, polygamy has become odious. Mothers, if you value the future welfare of your daughters, teach them self-respect; allow no one to poison their minds with the teachings that woman is man's inferior, and has no rights. How is it in many of our states; have the married women a right to control their own earnings? Have they the right to make a will? Have they the right to will away any portion of their property to their children? Have they the same right to dispose of their children as their husband has? Have they the right to vote on the

question of the expenditure of their own tax money? or on school or temperanec laws? Have they the right to vote for public officials, and thereby see that good and conscientious men are elected? No! Some women of New York state commenced an investigation of the normal schools of that state, and carried it through successfully. One of the school board being asked if profanity prevailed among the pupils of the public schools, answered with a laugh, "Oh! Yes! our children swear like the army in Flanders." The teachers almost universally complained of the prevalence of lying, stealing, profanity and impurity among their scholars. In one city a club was found to exist among the pupils of the high school for the purchase of obscene literature. These women purpose bringing about a better state of affairs, and so called a meeting of parents, more particularly mothers, from many of the cities and large towns of the state, and propose to lay before them the facts elicited by this investigation. In this way they hope to lead to a conscientions inquiry into the character and purpose of those who seek to be elected to the school board, and also that it may have the effect of opening the eyes of mothers to their responsibility in the newly acquired right of suffrage, which efforts are certainly needed to awaken many of the thoughtless and negligent to the duty they owe to their children's interests. Until recently woman had no power beyond the precinct of her home, and very often not even there, and it would be strange indeed if each woman were prepared to do her whole duty and do it well in this new field of labor. Among the best safeguards against vice are amusements and pure but entertaining literature; and seeond to none of these, teach your children to have some aim in life, to utilize their time. Elihu Burritt, the learned blacksmith, found time during his work at the forge to master several languages, and surprised cultured England by addressing its chief learned body in Sanskrit. Hugh Miller learned the secrets of the old red sandstone in the capacity of a day laborer. And so I could fill pages with living examples that were benefited by ntilizing their time.

SPECIAL ADVICE TO PARENTS.

The higher perfection of home depends upon the higher education of the female sex. This has been the key note of nearly all of our advanced thinkers and writers of both sexes, and at last the fruition of their hopes is being realized.

Why should not women understand the laws governing their organization, when such knowledge will the better enable them to educate and develop the higher capacities of their children and control or exterminate the evil tendencies of their natures? Not all, in fact few mothers realize the power for good or evil which they hold in their hands; they trust too much to school training to make their children what they desire them to be, and the time which should be given to their dear ones is given to society. One gay round of fashion and frivolity follows another; the poor votary of society leaves her darlings to the teacher during school hours, and to the servants and the street the balance of the time not given to sleep. Is it to be wondered at, then, that our boys and girls grow up to manhood and womanhood with little love and less respeet for parents and home, and an ever increasing desire for pleasure? They are only following the example set them. The mother with her yearnings for pleasure; the father at the club room, the lodge, or

perhaps a far worse place. What is there in such a home that the children should love and enjoy? Is it a home where they who should give it the sunshine of their presence are away? It is not alone the woman of fashion that neglects the best interests of her children, and fails to make the home all the word implies, but the working woman, surrounded with a thousand eares to tax both mind and body, forever in the home, but only in the capacity of servant. Where is the serew loose now? Simply her desire to ont-general her neighbor, by keeping the cleanest house, swinging out the largest washing and putting an extra amount of ruffles on her children's clothing, never regarding the graces and culture of their minds; no time for that. It is of small consequence as compared with an immaculately clean house. If in these busy moments she feels the clutch of little hands upon her garments, and questioning eves are seeking hers, and rosy lips are framing queries that may be much to the little one seeking light and guidance from that oracle of wisdom to the child-mother, again she has no time, and gives the little one no help, but a sharp rebuff, with the oft repeated command, "Don't bother me now-can't you see that I am busy?" How often do these and even harsher words fall from the lips of tired mothers-too often the husband coming in for a share. Better for the sake of your children let some of your many cares drop from your shoulders; and far better for your own sake as well, for the time will assuredly come when these little questioners will seek the street and get their curiosity gratified and ideas formed, not by those who have an interest in setting them aright, but, as it too often happens, from those of an immoral nature. If a neighbor asks you a question, or perhaps a favor, you

are ever ready to oblige, and this is as it should be; but be sure you are as ready to serve a member of your own family. Stop in your busy rounds and consider for one brief moment how your children will remember mother in after years. Shall it be the vision of a mother ever patient, loving and kind, with ever a helpful word of advice, covering up our faults with a jealous eye, that none might see our follies and indiseretions; or shall the remembrance call to mind a mother who never had time to smile or ehat with her ehildren: never time to cheer or advise them: a slave to her housekeeping and her neighbor's opinion of it. A mother who had so little insight into her ehildren's natures, that every tale-bearer could gain her ear to pour the story of her ehildren's misdoings into it; never time or even the inclination to investigate them, but time to eruelly scold and whip the little ehild without giving it the benefit of a doubt, or a chance to explain; but the tale-bearer, whether it be your neighbor or your neighbor's child, has witnessed the punishment, disgraee and humiliation; has seen the mother's unjust treatment and is satisfied. Mothers, have a eare as to how you treat your children, that such a vision as this may never arise before their mental eve when far away from you, and their minds are wandering back to home and mother. No greater eruelty can be practiced upon your children than the punishment of them before others, or retailing their faults, whether they are present or not. It will, in time, make them brazen, and they will cease trying to remedy their faults when they find that they are known beyond the family hearth-stone. Gain the confidence of your children by giving them your ear and counsel, and by dealing with them as justly as you would with your minister. If a tale is brought to you of their transgressions, listen to it calmly; make no comments to the bearer; but when alone with the accused, tell what you have heard, and ask for the truth; and, if you ask in the right spirit, you will almost invariably get the truth. Where is the child that is perfect; do not expect too much perfection in your children, when you expect it not in your friends. If a child can not go to mother for counsel and protection in its hours of trouble and sorrow, where on earth can it go? You had better neglect all else than neglect the happiness of husband and children; and, to do this, does not necessitate neglect of what goes to make a home pleasant or comfortable.

The power of the mother to mold the minds of her children for good or evil is beyond computing. To realize this, call to mind what the lives of our greatest and best men and women have been; then read of how their childhood was passed, and you will learn that, as a rule, a noble and loving mother planted the seed which has produced such great results. A mother's duty is great and varied; and it is never her pleasure to know the meaning of the word rest until death closes the scene. How many helpful things have the women of to-day that their grandmothers never knew -extensive education in all its branches, but best of all, when applied to home, is the knowledge of hygiene and physiology. Many understand, but refuse to carry it out, preferring to use their time in painting on china or silk gowns, or the practice of superficial accomplishments. Many a mother exhausts her vitality and weakens her eyes over the unlimited amount of fancy work she has always on hand to pick up the moment she drops exhausted from her household duties.

Why not take this time to read instructive literature, to amuse and instruct her children, by reading travels to them, or ehat, drive or walk with them, or drop into a neighbor's and exchange ideas, that your mind may not rust out. If you can afford it, buy your faney work, and give some poor woman a chance to earn a penny, and so save your nerves and health. If you know nothing of hygiene, study it, and apply it in your homes, and see its beneficial results. Through overwork, much of it unnecessary, and a disregard of physiology and hygiene, women become physical wreeks, and give to the world a race of children nervous, irritable and mentally diseased, and add to their folly and stupidity by giving them pernicious and unwholesome food, and cap their ignorance by housing them in darkened rooms that the sun's rays never penetrate—a perpetual bat's paradise, no sunlight, and in summer no fire to dry out the dampness. I have such a place (I can not call it home) in my mind's eye. Passing a certain house every day, and often twice, I could never discover any living creature moving about; eurtains drawn and doors closed; smoke issued from the chimneys, and other indications of its being occupied were apparent. At about the end of the third month, one day, when passing, I saw a woman and two children, who were occupants of the house, come forth; each wore glasses, and looked deathly white. Since then I have learned that it is their eustom to live in perpetual twilight, the kitchen being the only place where light and air ever enters. Is it to be wondered at, that they were pale and bloodless? It would kill the toughest plant if placed within those darkened rooms for days together. During all seasons of the year, but the hot months, keep your shutters

open and your curtains raised, and, in addition to this, if your rooms are tight and warm, leave the window open an inch at the top and bottom, or less, in winter, but wide in summer. Always leave your transoms open; remembering to ventilate your sleeping rooms as soon as you arise in the morning, by opening the windows at least half way; also, take all the covers from the bed and throw them upon chairs, letting them remain so for an hour at least. During the hot months open wide your windows morning and evening, keeping them closed during the hottest part of the day. Allow no animal or vegetable matter to decompose on your premises, or eess-pools to form, by throwing ont dish water and other slops, at a certain point, as it will breed disease. While seeking knowledge in directions often better suited to your tastes, feelings and desires, do not neglect anything which will, in any way, make the home pleasant. Although it is often asserted that the higher education of women, and the full development of their intellectual faculties, have a tendency to make them vain and conceited, it has no weight whatever on general principles.

How many of the male sex are afflicted with the same complaint, conceit; but in their ease it is not attributed to sex, but to the natural outgrowth of their individual dispositions. When women as a class are thoroughly educated, an educated woman will then cease to be a curiosity to the opposite sex, and a subject of sareasm and envy of her own sex.

It is a cruelty practiced upon young girls to expect or demand of them the sacrifice of a limited education, that their more fortunate brothers may be sent away to college and so be prepared to meet the responsibilities of life, while their sisters remain at home, and nothing greater or better is expected of them than the cultivation of flowers and petting of birds or poodles, with a little fancy work thrown in, and the long line of frivolous accomplishments that are expected to fill their time, minds and ambitions to their fullest extent, taking it for granted that all female minds are east in the same mold and must run in the same groove. Such accomplishments are not sufficient for the girl or woman of powerful understanding; of course men who are ignorant themselves will continue to raise the hue and cry of the unsexing of women, and view with jealousy their increasing advancement; and they are ever ready to advise them to stick to what they say nature adapted them for-procreating children and earing for them, for the sick chamber, to seenes of distress and to the distribution of charities. Of course these are virtues and duties well worth considering; but women can not put in every waking hour at these employments, varied only by her household duties, without rusting out mentally, and wearing out physically, thereby unfitting herself to be a proper instructor to her children, or companion for her husband. A woman with a superficial education is of no benefit to her family, herself or the human race. For the benefit of the coming man, let women be educated. The old theory was for the benefit of man; let woman remain in ignorance. Far away back in the primitive life of the human race, man gained his first advantage over woman for intelleetual development, through his dislike for work; while she was toiling to provide and prepare food and elothing, he was lounging about among his fellows, exchanging ideas, and telling of the wonders he had accomplished; he had ample time for thought and reflection, while she, poor fool, toiled on with no thought

of self. As the race advances, the man still maintains his advantages and ascendancy over woman, and while he becomes a worker, he still can secure more time, by many hours, for reading and recreation. And as the race has continued to advance, woman has vielded to man the right to sway and mold her destiny and rights, and, until within a few years, but few women have rebelled against what man decreed; not that any beside these few outspoken ones had ever given the subject a thought, but that there seemed to be no remedy to apply to so universal an evil; so unjust a state of affairs. And men have aided by flattery and the protection farce to keep up such a belief in their superior intelleet and superior acquirements, that but little resistance has been made. If it were true that man is the superior of woman, it does not redound to his honor, for his superiority has been gained by her sacrifices, for in all times and in all nations, women have been compelled to submit to a continued round of toil, and because of this, and also by man's superior advantages of gaining knowledge by contact with the world, he has been able to see and learn much without the aid of schools. Until within a few years past, medical and law colleges have been built and endowed for the sole purpose of educating men, as also other institutes of learning of the higher order. Her school advantages have been limited and poor, indeed, as compared with man's. Under circumstances like these, how easy a matter for the more fortunate sex to achieve renown, fame and glory, while women are toiling on in their drudgery and restricted sphere.

For the benefit of the human race, let there be no distinction of sex, but let women be educated alike

with men. She holds the destiny of man in her hand to an almost unlimited extent. If her tastes are high and ennobling, her sons and daughters will become imbued with a desire to be noble, good and great; if she be frivolous and weak, her children will be apt to inherit much that after contact with the world and practical training at school will not wholly obliterate.

Home is the first school and mother the first teacher; and there let the first as well as the last lesson be instructive, useful and agreeable. Do not hamper your girls with their sex; let them be youthful; let them romp, even though they become tom-boys; better be that than simpering invalids hedged in by fashion. Train your boys to respect their sisters and the female sex, that when they arrive at manhood's estate they will select wives who, through all coming years, will be companions to their understanding, their tastes and their pursuits; not simply housekeepers or ladies to preside over their homes.

Many men know but little of their sons, and leave the entire training to the mother. Often these sons need the counsel of father as well as mother, but the father and son are almost strangers. He knows absolutely nothing of his son's habits; perhaps the first time he fully realizes he is a father is when that son has brought sorrow and trouble to the home, and he awakens to the fact that no father's hand has been stretched forth to guide his erring footsteps. Our streets are filled with the youth of both sexes, and often till past midnight, our boys are in the street sowing the seeds of disgrace, only to reap the harvest of shame, disease and death; there our girls get their first lessons in vice—gradually the net is woven for their unwary feet that leads to shame and death. The

mother, engrossed with household duties, in objects of charity or pleasure, sees not the destruction awaiting her child; she has not made a companion of her daughter, and so has not gained her confidence, and the shipwreck of her child's honor is but a question of time; and when the awakening comes she loudly condemns her daughter's conduct, and bewails the fate that has given her such a child. Does she question herself as to how far her own negligence of duty to this poor weak girl has been the cause of her ruin? Does she recall to mind that this wayward girl has been allowed to roam the streets by day and late at night, and that unquestioned as to how and with whom her time had been spent? No; if questioned on these points she declares she had not the time to look after her child, and not even time to examine the books she read. No time to select good books for her; no time to read with her; no time to give her advice; no time to win a child's heart. She reads no books herself; she does not even know that the country is flooded with flash literature, ealculated and designed to poison the minds and hearts of children and fit them for the brothel, the prison, or the scaffold.

I take from a current number of the Sentinel, published at Indianapolis, Indiana, a report of the great terror to publishers of obscene literature, Arthur Comstock. He said:

"Last year I gathered the accounts of boy and girl criminals under twenty years of age. Thirty-three between the ages of eight and twenty were guilty of larceny; twenty-five between seven and twenty-one, of burglary; seven between the ages of nine and twenty-one were guilty of murder; eleven, the oldest sixteen, committed highway robbery; twenty-nine under twenty

were arrested for gambling, and two boys and girls committed suicide. It is a fine employment for our stalwart policemen to clutch a club in one hand and a schoolboy in the other. The figures for February, this present month, more than bear out what I say. There have been thirty-four arrests, the eldest only twenty-one, for lareeny; five murders by boys between nine and fourteen, and one girl shot her father, and four suicides are under eighteen. And these are not all poor boys, but often from some of the best families, like the son of a wealthy judge, who ran away, stabbed an adversary and afterward died in prison, confessing that he used to spend his time reading books of adventure.

"There are other dangers to children, and one of the chief is that hydra-headed monster, the lowest kind of literature, which breeds lust. When your boy or girl's name appears in the eatalogue of a school, it becomes so much merchandise, to be bought by seoundrels who send misery and death through the United States mails. The evil ean not be overestimated. The head of a female seminary told me that some one had surreptitiously obtained fifteen or twenty eatalogues. I tracked them to a dealer in addressed envelopes, and when I demanded them he brought out a great pile containing the names of thousands of boys and girls. I wrote to all the principals warning them, and replies eame from two female seminaries that the grossest matter had been introduced there, and before the year closed evil circulars and advertisements were sent back to me from the other."

I trust that after reading this report many parents will be put upon their guard, and watch over the safety of their children.

We want hygiene in literature as well as the home. There is an almost criminal ignorance of parents upon these subjects. But the women seem to be awakening at last upon these and kindred subjects, and also physiology; and a new dispensation seems to be upon us since even the male sex no longer consider a woman immodest who has a thorough knowledge of her own organization. We want mothers to give some of the time to improving their children's minds and morals that they give to the warfare with dirt. A portion of the time taken to concocting sweet morsels that often make dyspeptics, should be devoted to the cultivation of your intellects, so that when the family meet for a social chat, you may be able to regale them with something of more interest than a history of the day's oeeurrences and troubles. Too often the wife lavs aside her accomplishments the hour she lays aside her wedding garments as something not needed. Now, if her education be superficial, what attraction has she left to make home pleasant? Beauty, vivaciousness, and the light talk of the honeymoon; but when these wax and wane, what then? What charm to keep the husband to her side? None; her mind is dull and unstored, and her head as empty as a gourd; her husband sickens of her, seeks more congenial society. The children, if they have any, seek the neighbors or the streets. Man has done much to bring about such a lamentable state of affairs, by using every effort to keep woman from gaining an equal amount of knowledge with himself.

According to Bibieal history, woman first ate of the tree of knowledge, then gave to man; and he the glutton has been trying ever since to keep woman from getting another taste of it, but giving her, at all times,

the full benefit of all the dishonor that attaches to it. When man assigns home as woman's province, where she may reign queen over loving hearts, how many of these queen it over their own household—this domain set aside for them by their liege lords? how many of these queens of hearts and homes can exercise their own will? Can they purchase, sell, or even contract to make any improvements in this eden of theirs, without first consulting the husband? No, indeed. Their position is subordinate everywhere, from the wife of the President down to that of the mechanic or farmer. How many of these so-called queens can, or do control or dispose of any part of their property, or even direct the future of their own children? They are too often compelled by narrow-minded husbands to give a strict account of money expended, and bear harsh criticisms as well. Many women struggle along with housekeeping tacked on to them, who are totally unfitted by nature or training for any such work. As well say all men should be good farmers, as all women should be good housekeepers. The majority take to it and accept it after a fashion, but often their education and surroundings have been such that they could not see what else to do. These make slatternly, eareless housekeepers and bad cooks, and just here is where the trouble begins—badly cooked meals, indifferent wives and slovenly servants drive men away from these wretched homes to any place where cheerfulness reigns, be it the club, the lodge, the saloon, or the gilded palaces of sin. Very often these women, unfitted by nature to be home makers, put forth every effort to do what is supposed to be their duty, but are soon discourged by rebuffs from husbands that never praise. They endure tirades of fault-finding and bad treatment until they become as mere machines, indifferent to the happiness of those who should be their first eare. To make home what it should be, all must do their part. It may be a hard task, but try it and a greater per eent. of happiness than you ever dreamed of, will have been gained. Do not step out of the tidy attire of the young miss down to the slatternly garb of wife; do not make yourself odious by untidy or dirty garments, or rude speech; do not make love and the marriage bond the lieense to say impolite and rude things to each other. If you have but a moment to spare devote it to the little pleasures of home. Few men are so eallous that kind words gently spoken do not find their way to the heart. Too many men have a smile and a hearty greeting for every chance acquaintance, but upon reaching their own door it is the signal to assume a frown; they bestow nothing but frowns upon wife or children, inflicting the sour looks and bad temper upon the female members of their family that they dare not bestow on others. Such men are eowards at heart

The great foe to married life is inattention to the wants and feelings of each other, and quite often this indifference is equally distributed. If you want to live happily fight down this evil of getting used to each other; it robs life of its brightness. Marriage is not a mistake unless you make it such. Once you stood face to face, and eye to eye; no words speak stronger; keep your eyes open to each other; whatever of manliness or aught else you saw in him that won your heart; whatever charm of mind, manner, or beauty you saw in her that won you to her side; the charm that made you importune her to name the wedding day, shut it not out now; keep it before your

eyes; let the horizon of your wedded life become more brilliant each year. To solve the problem of a happy married life as was designed by our creator, the noble devotion and tenderness of the early married life must be maintained; let the heart receive full pay for its devotion. When the wife fails to make the home a place of rest, free from care, a place in which to be loved and caressed, she loses just as she makes the home the reverse. Many good, moral women neglect home and children to sew for or collect money for the poor heathen. Let the husband see to it that he appreciates all the kind efforts his wife may make to please him, for the time will come sooner or later to all mankind, when discouragements and misfortunes will beset them, friends grow indifferent or cold, then the wish will almost fall from the lips, "I wish I were dead." It is then the ivy and the oak change places; it is then the seeds of kindness and affection you have sown in the past will reap you a bountiful harvest.

Would to God we had more happy homes, and when such an eden of beauty and peace crosses our path, we gaze in wonder and admiration; and why? because so few happy homes are to be found. Then turn upon your homes the sunlight of happy smiles. Let the beautiful and best your home contains be for your dear ones. Let an air of good breeding and kindness prevail, never forgetting that members of the same family should never make an exhibition of their temper in public, if at all, which often happens and gives to the seoffer a chance to laugh. Make no extravagant demonstrations of affection for each other before others, but the man or woman who shows respect and kind attention to each other before the public will elevate themselves in the eyes of all, and doubly endear them-

selves to each other. But what of the poor woman, with never a word of praise or encouragement, whose life is a constant irritation, with no servants to lighten the weary hours of drudgery, and help support the heavy load of household cares?

The women of wealth escape much of this harrowing life of toil, but they have to meet other demands upon their time, necessitated by fashion's decree, that makes life anything but one of ease. There is only one way to make it better, be cheerful and systematic in your work, and do not attempt to do more than your strength and justice to yourself and family will sustain you in doing; far better saerifice some of the Inxuries or even necessaries of life to enable you to hire the help you need. Do not dispense with help to save money, or through an indisposition to instruct and watch them and undertake the tasks you are unable to perform. It requires a vigilant eye to regulate the management of the household and prevent the waste that thoughtless help bring about. Silver spoons are used to scrape the kettles, coffee, tea, pepper and spices are left open or loose, and are wasted or lose their strength; potatoes, turnips and onions are left to grow in the eellar, the sprouts are not removed, and they become worthless; brooms are not hung up and are spoiled; dust pans and brushes are thrown around and destroyed, cooking utinsels are left standing with water in them, fine-handled knives are thrown into hot water and are destroyed; the flour is sifted in a wastful manner, and dough left sticking to the roller and tray; soap is left to dissolve in the water; elothes are left on the lines to whip into shreds in the wind; tubs, barrels and buckets are left in the wind and sun and fall to pieces; dried fruits are not eared for in season, and so become

wormy; rags, strings and waste paper are thrown into the fire or the street; pork spoils for want of salt, and beef becomes tainted because the brine needs sealding; bits of bread, meat and pudding are thrown away instead of being warmed or steamed over, and so waste breeds want, and keeps families poor. The husband often becomes a financial and moral wreek, and to make up for the leakage at home and useless extravagance he resorts to crookedness and sharp practices, and soon finds himself a doomed man behind the prison bars. It is very often the ease that the wife does not know the amount of her husband's income, and I am sorry to say, sometimes she does not eare, as long as she has the requisite amount of funds to gratify her tastes, though often the husband may be to blame for such a state of affairs; yet, it can never be even guessed at with any degree of correctness. Quite often the husband retains after marriage all the boon companions of his batchelorhood; the fellows call him a "jolly good fellow" and pander to his conceit, and the luxuries that went with it. The wife retains her extravagant tastes for fine dress and display.

It is impossible to fathom what mysterious influences have combined to consummate a marriage between those two, so totally unsuited to each other, for the high and honorable duties of married life.

How much of this married misery can be traced back to the childhood of each? The boy, accustomed to roam at will, often with his pockets well supplied with eash, that he may indulge and gratify his every passion and pleasure; no restraint placed upon him; and, added to this, often hearing the foolish remark, "Oh! boys will be boys." True enough; but boys one day become men. It is then their early training

will show the effect it has had upon them, and they will take their place in the world, either as useful members of society, or as a curse to the same.

The girl developes into the woman, and in either the married or single state becomes a blessing, a nuisance, or a curse to society. Let not the youth of both sexes believe their education complete until they have mastered a profession, business, or trade that will enable them to make their way in the world, whether the occasion ever requires it or not, for wealth often changes hands.

For lack of a small amount of business knowledge, many a poor widow and her children have been cheated by dishonest administrators out of the property left them by their provident husband and father. She gains a little knowledge of business now in the bitter school of adversity and experience. Her teacher often having been the confidential friend of her husband, and one in whom he placed more trust and confidence than in his wife, to see that his children would be fairly dealt with after his death. Every man should be just to wife and children, never permitting any one to take advantage of them through his negligence or confidence of justice being meted out to them after he is gone.

THE HEALTH, DRESS AND MANAGEMENT OF CHILDREN.

There is nothing concerning the human race of more importance and less understood than the management of children. It begins with infant life and may end anywhere from the cradle to maturity. How much infants suffer from the pernicious management of fashionable or ignorant mothers can never be known. Their dress at the beginning of life is simply a crueifixtion or torture; and the poor innocent babes become the victims of fashion, folly or ignorance, according to their mothers' station in life. The first article of dress is the belly-band, which is intended only as a means of support, but it is too often made an instrument of torture, and, when removed, the traces of its work can be seen in the red ridges left in the sensitive and quivering flesh, which can searcely bear the pressure of the hand, proving, conclusively, that the poor child had good cause to cry and so make its sufferings known. But often this feeble protest is not understood, and its cries are attributed to colie or hunger, and mayhap ill nature, and so it is dandled, fed, or kissed, and given soothing syrups and teas of various kinds to stop its cries, when the simple removal of all tight clothing would work an almost instantaneous cure, and convert tears into baby rapture. Mothers who have fretful infants try this remedy first before dosing with medieines, or over-feeding. It is not always eolie or hunger that eauses a child to cry, but tight or uncomfortable elothing, yet over-feeding or improper food too often produces distress and courts disease and death.

It is often the case that mothers give their infants nurse every time they ery, even should it be every half hour, which is a very bad practice.

The dress of infants should at all times be free from undue pressure, and made to insure comfort, the band being loose enough to admit of passing the fingers between the body and band, and so admit of the free passage of air between the clothing and the body, an essential to comfort and health. If you want your children to be happy and to be a pleasure to yourself, make their garments loose enough to admit of their rapid growth, or replace them with new ones as often as needed. The elothing of infants should, when at all possible, be made of soft and flexible material, that it may not irritate their delicate and tender skin; it should be free from stareh about the waist and sleeves; embroidery and ruffles should be eschewed, or at least never starehed. The practice of starehing the waist or neekbands of infant's elothing has eaused untold suffering by chaffing, even to bleeding the bodies of these little victims of a mother's pride or ignorance, or perhaps both!

In my daily practice I have been ealled upon to prescribe for hundreds of such cases. My first advice being a prescription to affect a cure of the wounded flesh; and my second, to remove the cause. How often the young and inexperienced mother, solicitous for the welfare of her babe, will encumber it with enough clothing to weigh down her own person, tortnring its delicate frame with innumerable skirts of extraordinary length and heavily embroidered, to add to the discomfort, and to keep the skirts from becoming soiled by con-

tact with the floor, she doubles the skirts up under the infant, hampering and cramping its legs and feet in such a manner that it can not use them. In this unnatural position the child is compelled to lie for an hour or more at a time, without change of position in any way, until baby nature can endure no more and a quick succession of yells follows, which, of course, is usually attributed to hunger or colic. The practice of allowing a child to lie for any length of time with wet or unclean clothing on is pernicious in the extreme; but what can be said of those mothers who will leave their infants for hours in a cradle perfectly saturated with filth, and for no reason save that they want to accomplish a certain amount of work before attending to their wants! I have visited families in which the eradle or child's bed had become so filthy through neglect to purify the bedding, that it could be smelled throughout the entire room, and this in families where the parents' bed was to all appearances clean and pure.

Endeavor at all times to clothe your children suitably to the weather; because the month of May is generally accepted in this latitude as the month to lay aside winter clothing, it does not necessarily follow that you should do this; you must be governed by the weather. The winter clothing should be gradually changed to that of lighter texture.

As children advance in years do not imprison their young minds in a net work of sage advice, but let them expand at their own sweet will; insensibly they will pattern after and pick up the ideas of their elders. Be sure you do not make a hawk's nest of your home, or your children may resemble that bird in their dispositions. Children are born imitators, and it is ever

well that they should have something good rather than evil to pattern after.

The foolish desire of parents to make their children smart or perfect, will incite them to eram all sorts of useless knowledge into them at a tender age and often at the expense of health and even life. A child's studies should be suited to its years, and the more so if it developes a precocious intellect; not meaning, however, that a child of brilliant mind should be kept in the traces with stupid children of its own age, but rather that its mind may not be taken advantage of, and be pushed to its greatest capacity at the expense of a neryous break-down later in life. It is often the ease that children are put through a course of training at an early age to eliminate all their natural traits and desires; this is injudicious in the extreme, unless all its natural instincts are entirely wrong or bad, which is seldom the ease where a child has been guided arightat the outset. Many children are made to suffer through the bad management of parents, guardians, nurses, etc. At the beginning of life they are subjected to the petty tyrannies of their elders, who allow them no free expression of opinion, which is natural to them. A fitful, uneven and often a tyrannical temper is the result, which could be avoided if attended to in time. In forming the habits of your children you can not be too guarded in your conduct before them. In large and small families how often one child, either the youngest, the most beautiful or precocious is singled out to be spoiled by petting and teasing, or undue indulgence, thereby destroying the child's future prospects for happiness or usefulness. Sooner or later the parents try to undo the work of years of foolish training, but find the task difficult in the extreme; the child has been a

king in the domestie kingdom and will not yield readily to restraint of any kind, and resents it in a way not to be mistaken. It has been the pet, praised for its freaks of temper; praised for its sharp tongue; praised because all have to yield to its authority; praised by the family, and praised by visitors. Is it any wonder it becomes a nuisance, dreaded at home and shunned by its playmates? It demands what it wants; the mother feels it to be her duty to deny it now and then, but she has not the courage to meet its demands with refusal and so when it asks for more goodies it is told they are all gone. It knows at once this is not true, and understands mamma is practicing a deceit upon it; so she teaches it deceit and falsehood; the lesson is not lost; it results in applying the lesson it has learned upon others, for which it is sometimes whipped; and so begins another course of training, quite as fruitful of bad results as the former. Children should be taught from their earliest understanding to respect their parents, but not through fear of punishment; the fear of being whipped has made many a child use deceit and falsehood. Some ehildren may be forced to do right through fear, but they will never have due respect for what force accomplishes.

The mother who takes her erring child to her bosom and with sad voice and face shows it the error of its way and the sorrow it has brought to her heart and their home, will find her reward in the tearful face and repentant heart of the child. If your children are nervous and timid, never punish them by shutting them in dark places; this has been the cause of making hundreds of cowards and has been their curse through after life. I have many times prescribed for children in convulsions which had been produced by their being

shut up in dark closets or cellars. Whipping or punishment to sharpen the intellect or understanding of a dull child will defeat its object, and is cruel and unjust; as well expect the bird to fly without its wings. When children are sluggish and disinclined to study or work, they must be given an incentive to begin with; try to fix their mind upon some one study, or some kind of work which is agreeable to them. This can be done by exercising patience, kindness, forbearance and firmness. Too often by harsh means they are taught their first lessons in brutality by parents or teachers.

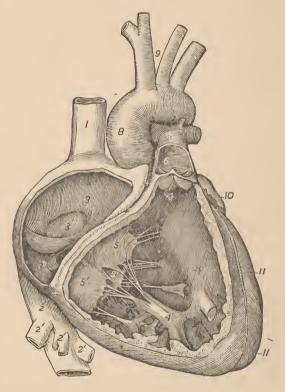
In the home where peace, love and pleasant voices reign, the parents judicious in management, will be found children respectful, obedient, loving; affection is met by affection, and so harmony prevails. Children, selfish in their desires, must be trained out of it gradually, or else they grow up to be self-willed and disagreeable.

THE CIRCULATION OF THE BLOOD.

The large channels through which the blood flows are called arteries and veins, the smaller channels are the capilleries and venous radicals. The arteries are cylindrical tubular vessels which serve to convey the lifestream to all parts of the body. These vessels are named arteries, from the two Greek words and (pronounced) haer, the air, and Typew, taerin, to contain—to contain air—from the belief entertained by the ancients that they contained air. Galen, however, refuted this opinion, by showing that these channels were filled with blood during life, though, for the most part, empty after death. Harvey, an English physician, was the first to discover and describe the circulation of the blood, but did not seemingly understand the means by which the blood passed from the arteries to the veins, he having no knowledge of the eapillaries through which the corpuscles of the blood are transferred. Harvey made his renowned discovery in 1618 or 1620, but did not give it to the world until 1628, when he published his celebrated work, entitled "Exercitatio de Motu Cordis et Sanguinis," A Dissertation on the Motion of the Heart and the Blood. Previous to this publication the views held upon the question of the circulation were so vague as to be unworthy of notice; and yet, strange as it may appear, Dr. Harvey was denounced by his professional brethren, and his discoveries were not given credence, nor entertained by physicians in his day. We are told he was treated like a quaek and an impostor by his brother physicians, who by so doing but made manifest their littleness professionally, mentally, morally and socially. Philanthropists and public benefactors are usually badly treated while living, and not thoroughly appreciated until death makes a void not easily filled by earrying them off from their works. This has been the ease in all ages and climes with respect to men whose views have been in advance of their day. When Jenner discovered and published the fact that vaccination modified small-pox, he was denounced as an imposter, and was constantly persecuted; but to-day a monument is being erected to his memory in commemoration of his knowledge and skill.

The heart is the great organ or force-pump that propels the blood throughout the entire system. I here present plates and diagrams showing the heart with its valves and its division into four chambers-right and left auricles, and right and left ventricles. The aurieles are situated on the uppermost part of the organ, and are so named from their fancied resemblance to ears, the Latin word for which is auris; the ventrieles, for a similar reason, after the Latin word venter, meaning belly. The ventrieles are more museular than the aurieles; and the left ventricle more museular than the right. The course of the river of life—the circulation, is as follows: The venus blood flows into the right auriele; from the right auriele to the right ventriele, coming originally from the large veins, the ascending and descending vena cava, and the eoronary sinus. By the contractions of the auricles and ventricles the blood is forced through the pulmonary arteries into the lungs, where it absorbs oxygen and gives off earbonie aeid; in its transition from venus to arterial,

the color is changed from blue blood to red blood. From the lungs the blood returns to the left side of



The right auricle and ventricle showing the internal structures. 1, superior vena cava; 2, inferior vena cava; 2', hepatic veins; 3, right auricle; 3', fossa ovalis and below it the custachian valve, and beneath it is figure 3, close to the opening of the coronary veins: $\mathbf{x} \times \mathbf{x}$, the groove between the auricle and ventricle; 4 4, cavity of the right ventricle. Above the upper figure 4 the semilunar valves can be seen. 4', large columnæ carncæ; 5, 5', 5'', tricusped valves; 6, the cavity of the pulmonary artery; 7, the aortic arch; 8, the commencement of the aorta at the base of the heart; 9, between the innominate and left carotid arteries; 10, appendix of the left auricle; 11-11, the outside of the left ventricle. (After Hartshorne.)

the heart, through the pulmonary veins, first entering the left auricle, and thence passing to the left ventri-

ele; whence it is impelled into the great aorta, or large artery, through which channel and its wondrous net-work of ramifications the life-blood sweeps on, visiting every part of the body, through the eapillaries; then passing to the venous radicals, and thence to the viens, and through them back to the heart again. During the rounds of the circulation, the elements to sustain life and replace disintegrated tissues are deposited from the blood as it passes through the eapillaries. Thus, as each molecule is dissolved or destroyed, another takes its place, and every portion of the body is constantly being replaced as the worn out particles are thrown off. The quantity of blood in the human system averages about eighteen (18) pounds to a man weighing about one hundred and forty-five (145) pounds. The heart forces about two (2) ounces of blood into the aorta and two (2) ounces into the lungs at every contraction or pulsation. Calculating the rapidity of the heart's action at seventy-two (72) beats per minute, it takes just two minutes for all the blood in the body to pass through the entire circulatory apparatus, or thirty (30) times every hour. By simple multiplication you can carry out this calculation and find that the heart performs the enormous labor of propelling ten hundred and eighty (1,080) pounds of blood through the rounds of the circulation every hour, or twenty-five thousand nine hundred and eighty (25,980) pounds of blood every twenty-four (24) hours, equaling thirty (30) tons of blood, less eighty (80) pounds. One year's labor of the heart, in ordinary health, is the propelling through the arteries and veins nine million, four hundred and sixty thousand, eight hundred (9,460,800) pounds of blood, or four thousand seven hundred and thirty-one (4,731) tons. The heart of

Peter Cooper, the philanthropist, of New York City, on his last birthday, his ninety-first (91st), according to the foregoing calculation, completed the herculean task of propelling throughout his body eight hundred and sixty-one million, five hundred and twenty-eight thousand, nine hundred and sixty (861,528,960) pounds of blood, equaling one million, six hundred and fortyone thousand, seven and one-half (1,641,0071) hogsheads. This calculation only tells of the normal action of the heart. If so, what must be the amount of labor strain upon that organ when, as in febrile attacks, or abnormal conditions, the pulse rates from one hundred (100) to one hundred and twenty (120) beats per minute? After these considerations and calculations, remembering that the heart never stops once for a rest during life, who can refrain from exclaiming: bless the sturdy, valiant, hard-working heart."

The blood is composed of red and of white corpuscles, and the *liquor sanguinis*. When subjected to chemical analysis we find the following substances as its constituents, in the proportion indicated:

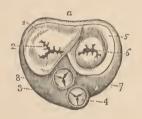
Water		688.00
Globuline		282.22
Hæmatine		16.75
Fatty Substances		2.31
Extractive Matters (undetermined)		2.60
Chloride of Sodium.		
Chloride of Potassium.		
Phosphate of Soda.		
Phosphate of Potassa.		0.10
Sulphate of Soda.		8.12
Sulphate of Potassa.	1	00.00
Phosphate of Lime.		
Phosphate of Magnesia.		

When there is a deficiency of the red corpuscles, we

say the person is anamie; they appear pale and are unable to withstand fatigue or exposure of any kind.

When there is an excess of the white corpuseles, the condition is an evidence of the presence of a disease we call *leucocythæmia*. It is often an accompaniment of enlarged liver, spleen or lymphatics. The freer and more regularly the blood circulates through the capillaries, the better the state of the health.

Diseases of the heart are generally fatal. Rheumatic endo-carditis is an inflamed condition of the lining membrane of the heart, resulting from rheuma-



BASE OF THE HEART.

1, right auricle; 2, tricuspid valve; 3, right ventricle; 4, pulmonary artery, showing semi-lunar valves; 5, left auricle; 6, mitral valve; 7, left ventricle, 8, aorta, showing semi-lunar valves. (After Hartshorne.)

tism. This is a very dangerous malady. If the person attacked recovers, he is simply permitted to live to suffer from valvular disease; or, more properly

speaking, defective valves of the heart.

During inflammation there is fibrinous exudation thrown out upon the valves, which thickens them, and if not absorbed, prevents them from closing properly. They leak, or allow the blood to regnigitate or fall back, after the fashion of an old, worn-out pump. We also recognize a heart trouble that is peculiar to aged people. It is termed ossification of the valves and the chordæ tendineæ. It destroys life. Ossification often

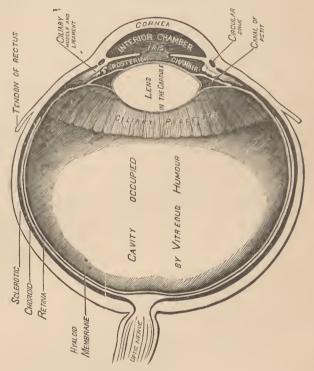
attacks the arteries of the aged. When this occurs the person soon suffers from senile gangrene mortification. There are hearts whose muscular tissues are weak (on this subject I speak fully elsewhere); these we call weak hearts. Persons possessed of hearts of this kind, or very small hearts, can not endure hardships or great excitement without feeling faint; they can not face danger or ghastly death without feeling as if their time had come. These are the faint-hearted, chickenhearted ones whom we can easily distinguish from those who are large and stout of heart and strong of nerve.

THE EYES.

SEEING is one of the most important of the five senses; much of human happiness comes through the eye; very much of the knowledge we possess we obtain through the medium of the eye, the sense of sight. Some obtain more information through the medium of the eye than others, even where they are placed under similar circumstances. This is due to what phrenologists term large or small perceptions. Some persons will pass along the street and notice but little, whilst others will see everything worthy of notice. The eyes are frequently very much abused by reading in flickering lights, or in the evening before lighting lamps, and upon railroad cars whilst in motion. Many children have defective vision from birth, and need glasses to bring the rays of light to a focus upon the retina of the optic nerve. Through the neglect of parents, guardians or teachers to procure the proper glasses, their eyes are injured very much. The eyes are globular in form, with the cornea set upon them of a lesser curvature than the globe proper; it comprises onesixth of the globe. We have three coats, selerotic, choroid and retina; also the cornea, iris and crystalline lens, and the cilliary muscles or bodies, which perform the office of accommodation by pressure upon the crystalline lens, causing a greater convexity.

Then we have the *conjunctiva*, a mucous membrane, so called because it unites the globe of the eye with the eye-lids. It covers the anterior surface of the eye,

the inner surface of the cyc-lids, and the caruncula lacrymalis; it possesses great sensibility, communicated to it by the fifth nerve. We also have six muscles to each eye, which are called external, internal, superior and inferior recti muscles and the superior

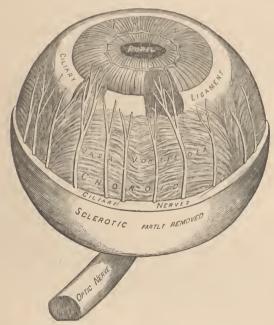


THE EYE. ITS COATS AND CAVITIES. (AFTER GRAY.)

and inferior oblique. Contraction of the internal recti muscle, or paralysis of the external recti, results in convergent strabismus, cross-eyes; defective vision may also cause it. Many cases may be cured by an operation, whilst others can be corrected by proper glasses.

The eyes are liable to various diseases and inflam-

mations, most of which require the expert treatment of an experienced oculist, or very well qualified surgeon. No physician who has not made the eye a special study should attempt to treat such diseases, unless it is simple conjunctivitis. In simple inflam-



THE EYE. ITS COATS AND NERVES. (AFTER GRAY.)

mation from cold, catarrhal conjunctivitis, the eyes look red and are very painful, and discharge muco purulent matter. For this simple form of eye disease use the following eye water, every three to six hours:

R	Zinci sulphatisgrs. ss.
	Morphiæ sulphatisgrs. i.
	Aquæ destillata $\overline{5}$ ss.

M. ft. collyrium, filter. Sig. One or two drops in the inflamed eye every three or six hours.

In addition to the above treatment, the eyes should be washed with pure rain water several times a day, and smoked glasses should be worn to prevent the pain and lachrymation, flow of tears, eaused by the sunlight. There are many other forms of inflammation of the eyes, all of which require the knowledge and experience of oculists or those understanding the eye and its diseases. Never depend upon inexperienced men to treat a diseased eye; if you do, you may lose your sight. Hundreds who are in our blind asylums are the victims of unskilled practitioners, and might still have their sight if they had been properly treated at the beginning. Babes immediately after birth frequently get inflammation of the eyes, opthalmia neonatorun, from the secretions of the mother, and hundreds become blind from the want of proper care and treatment. The pus, matter, should be earefully washed from under the lids with an eve syringe, using clear lukewarm rain water. This should be done often to keep the matter from accumulating under the lids, and increasing the inflammation, thereby eausing corneitis and ulceration of the cornea, glass of the eye, which usually occurs if neglected. The lids should be gently pulled out from the eye ball, and a stream of water gently thrown under the lids until every particle of matter and mucous is removed. It may be necessary to wash out the eyes every half hour or hour in very bad cases, then use the following eye water:

R	Acidi tannicigrs. v.
	Hydrastiæ sulphatisgrs. ii.
	Morphie sulphatisgrs. v.
	Aquæ destillatæ
	Mucilago acacia

M. ft. collyrium, filter. Sig. Drop in the eyes every half hour to three hours.

Much might be written about the eyes, but I trust I have given sufficient advice, which, if followed, may prevent hundreds from groping their way in darkness. In conclusion, let me say to you all, be careful of your eyes, and do not trust to the ordinary practitioner when it is possible to consult a good oculist if you have any form of disease of the eye, pain, or loss of sight.

THE EARS.

The sense of hearing, whilst it is not as important as the sense of seeing, is, nevertheless, of too much importance to be neglected, as it usually is. Very many lose their hearing through ignorance or neglect. Children frequently have abscess of the ears, caused by cold, and, through the neglect of the mother, pus matter is allowed to accumulate upon the tympanum drum of the ear, often resulting in inflammation, ulceration and loss of hearing. It is of great importance to keep the meatus auditorius extrenus canal open, and all the pus matter washed away, to prevent disease of the drum. When the disease becomes chronic always consult a well qualified aurist surgeon, who will give you the proper treatment. Repeated acute catarrhal attacks usually affect the hearing somewhat, by thickening up the drum, and also by closing the eustachian tubes leading from the mouth to the internal ear. In chronic cases of abscess the bones sometimes become affected, or diseased and decayed. The discharge then becomes very offensive, and can not be cured until the dead bone is all removed. In abscess and pain in the ear, laudanum and sweet oil, in equal parts, dropped into the ear, will give relief; also, hot fomentations of hops and chamomile should be applied often, with a cathartic dose of liver pills (F 3), and one grain of opium every two or three hours to adults until relieved.

Persons suffering with abscess of the ear are liable

to have a cough, and it will continue until the ear is cured. Swimming of the head—vertigo, is also an attendant of (otitis) inflammation of the ear. The ears



SEXTON'S EAR DOUCHE FOR CLEANING THE EAR.

should be kept well cleansed. I have frequently removed large quantities of *cerumen*—wax and dirt from the ear of patients, where it completely plugged up the orifice and caused dullness of hearing or deafness. Where such is the case, fill the ears with pure sweet

oil and glycerine, in equal parts; then plug with cotton so it can not get out; continue once every day for one week; then wash the ear out with a small syringe, using soap-suds. If you can not remove the plug of wax and dirt, go at once to a physician and have it removed, and have the ears examined, and see if there is any wax or dirt remaining; if so, use the oil and glycerine as before. The eustachian tubes often become closed from colds, eatarrhal attacks, and the hearing becomes impaired. It is then necessary to have them opened up. This can be done only by a surgeon, by foreing air into the tubes, with instruments made purposely for such treatment.

DIGESTION AND THE ABSORBENTS.

In our last lecture we gave you a brief outline of the ear; we will now teach you something about digestion, and how portions of the food we eat are absorbed and earried into the blood to replace and repair the tissues of the entire body, the destruction of which is constantly going on, as we have seen in a former lecture. Every breath we breathe burns up a certain amount of earbon in the change that takes place chemically or vitro-chemically by the inhalation of pure air into the lungs. At each expiration earbonic acid is thrown off and the blood is purified and filtered to again pass through the rounds of the circulation and repair the wasted tissues.

We will also remind you that the digestive process is simply dissolving or liquifying and changing the character of the food so it can be absorbed or taken up into the circulation. The process is mechanical and vitro-chemical; the first being mastication and insalivation; chewing and mixing with the saliva—the saliva being alkaline—and possessing the properties of converting the starchy material into sugar, it is then swallowed into the stomach, and the mucous membrane of the stomach pours out a fluid called gastrie juice, which is of such a chemical and vital nature, that it will dissolve and chemically change portions of the food before it passes from the stomach. The oils and fats are broken up or emulsified by the action of the pancreative juice which takes place in the duodenum.

The bile also exerts an influence, and still farther on, we have the intestinal juices which finish up the digestive process of all the digestible food. The main part of digestion or at least half as much as in all other parts of the alimentary canals takes place in the stomach by the food being brought in contact with the gastric juice. As soon as food is swallowed into the stomach, it excites the gastric tubules to action and they commence pouring the gastric juice into the stomach which mixes with the food. As we have heretofore spoken of digestion in our lectures on indigestion, we will now pass on to that of absorption, which is accomplished by the follieles, glands and villi, viz: Brunner's duodenal glands, follieles of Lieberkuhn intestinal villi, Peyer's glands of the illium, and the mesenteric glands, which are also called the lacteals. Thus you see digestion and absorption takes place throughout almost the entire alimentary tract. The greater portion of the digested fluid is taken almost directly into the venous circulation, by means of the villi, whilst still others are carried into the thoracic duet and through it the chyle and lymph is carried into the left subclavian vein just outside of the internal juglar, where it unites with the subclavian to form the left innominate vein.

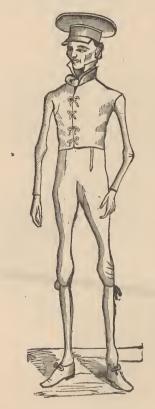
When the absorbents fail to perform their functions properly the result is death from *inanition*, starvation; what has been taken into the stomach may have been properly digested, but the nutritive properties not being absorbed or taken into the circulation, it follows as a matter of course, that starvation must be the result, no matter how much food is consumed.



THE LACTEALS AND LYMPHATICS.

The large white line represents the thoracic duct, through which the chyle is carried into the left subclavian vein; the enlargement at the bottom is called *receptaculum chyli*; the fine lines represent the lymphatics. (After Dalton.)

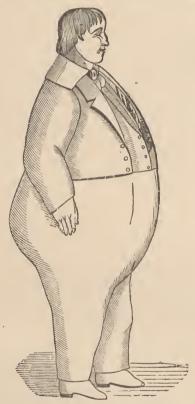
Many persons have been made the subjects of exhibition on account of their lack of flesh or fat, *living skeletons*. One of the most noted of these was Dr. Calvin Edson, who weighed only forty-five pounds at the



DR. CALVIN EDSON.

time of his death, which occurred in 1833. Dissection revealed the fact that the thoracic duet, which conveys the nutriment of the food into the blood was constricted. [See thoracic duet in the plate.] We also see persons inclined to obesity, fat gathering; they in-

herit a tendency to it, or acquire it, which you see illustrated in the cut of Lambert. To avoid excess or diminish it when acquired, you must avoid all foods rich in starch as much as possible, also avoid sugar



THE VITAL AND LYMPHATIC TEMPERAMENT COMBINED. (Excessive Nutrition.)

Daniel Lambert, of Leicestershire, England, who Weighed 528 Pounds.

and syrup; live more upon a flesh diet, drink neither ale, beer, wine or whisky, all of which favor obesity by arresting molecular disintegration of the tissues; take plenty of active physical and mental exercise and do not eat to excess.

Where the person wishes to take on fat, good nutricious food should be eaten, especially starchy food, such as potatoes, oat meal porridge, bread, and sugar or syrup when pure or free from poisonous adulterations; bathe regularly, sleep plentifully, take the world easy, and cultivate mirthfulness and cheerful society; never indulge in excesses of any kind. Remember, however, that excessive fat is not a sign of health, but very often the converse, disease. People frequently die of fatty degeneration of the brain, liver, kidneys and heart. I trust I have been sufficiently plain to enable all to fully understand the nature and character of the lacteals or absorbents and their offices.

INDIGESTION; OR DYSPEPSIA AND ITS TRAIN OF ILLS.

NEXT in prominence to the tenacity with which we cling to life, comes our hunger—our intense desire for pleasure. Instinct impels us to the one, and our selflove inclines us to the other. We regard pain as our most malignant enemy, and we east about for some friendly power to conquer this formidable and remorseless aggressor. We want the victory over this mereiless tyrant, not so much for the glory of the conquest, as that the consequent serenity and quiet joy may be ours to possess in permanency and peace. Death is associated in our minds with suffering and loneliness, coldness, darkness and great loss, and to some the grim monster presents all the horrors of annihilation. Intuitively and naturally we all shudder at this pieture; we shrink from the silence and isolation of the tomb, and yearn for continued association with humanity, and for the warmth and cheer of the social sunshine. We wish for ourselves and dear ones the realization of the old-time toast—"Long life and good health" long years and multiplied in the company of those, and amid the seenes we love; and good health-so good that every function and motion of the body is a joy; and that we may be filled with every good thing that is agreeable to our being. The enjoyment of pleasure in this world, aside from the spiritual yearnings of some, is the great object of life and of all our strivings. I do not say this is as it should be; but it

is as I find it, and as all must find it who take the trouble to closely observe the ebb and flow of the tides of human affairs. These things being so, how inconsistent must not sickness be with regard to our acknowledged and much-sought highest temporal good? How blind to natural obligation and self-interest must not the person be who neglects or undervalues health? What an affliction a hitherto pleasurable passion becomes to the sick one; how painful the quondam delight; how disgusting that indulgence, that beverage, that person, that eompany, when through excess or neglect the digestive apparatus become disordered, and emaciation, heart-palpitation, nervous break-down and general prostration holds the sufferer down on a bed of sickness. It is then that we begin to learn wisdom: to distinguish between the true, real, lasting pleasure, and the miscalled ephemeral joy; the pleasure that will bear cheering reflection, and that mockery, the memory of which shall not fade away. It is then, when invited sickness holds us in its deathly grasp, that millions of money, and diamonds, and even fame itself, would be bartered for the oft-abused, poorly appreciated mother of all real pleasures—good health.

I have been led into these prefatory remarks from a consideration of the nature of the subject upon which I am to address you. This subject is the misnamed, many-sided malady or combination of miseries ealled dyspepsia. It is a misnomer from the fact that the two Greek words δv_5 [dus] bad or difficult, and $\pi \varepsilon \sigma \sigma \varepsilon v$ [pessein] to dissolve or digest, from which, as roots, we derive the Latin word dyspepsia, and, finally, our anglicised form of it does not convey anything like an adequate idea of the extent and nature of the numerous ills concomitant with and sympathetic of this wide-

spread, illy-understood and seldom eured affliction ealled dyspepsia. Medical writers, with few exceptions, do not accord to indigestion a place among the numerous family of diseases. This may be accounted for in two ways: Either they have not studied the question, accepting the views of their predecessors on the matter, or they may have acquainted themselves thoroughly with the disease, but, in giving its symptoms, they may have become bewildered by finding themselves telling of the scientific land-marks and professional finger-boards that are found on the avenues leading to some of the most serious maladies that affliet the human body. It was just in this way that hysteria began to be regarded as of little import; and it is just this class of ignorant or puzzled professional gentlemen who stand around and laugh at a female in hysteries, little thinking or caring to know that back of these fits there is a diseased condition of the nervons system. The term indigestion, in our day, does not imply seriousness in affliction, nor even much suffering. The reasons for such opinions are, lack of knowledge of the importance of good digestion, and of the complexity of the process; and because those who speak lightly of the disease are those who have never felt its pangs. Digestion begins in the eavity of the mouth and ends when the residue or neglected partieles of the food are ready to be excreted. The stomach is the receptacle or laboratory for all the solid and liquid foods, the substances of which we need for nutritive purposes-for building up the body and sustaining it against wasting and decay. When this organ and its assistants in the process of digestion fail to properly perform the digestive act, the food, instead of undergoing the proper transformation ferments and

rots, gives off poisonous gases, becoming putrefaction itself, is taken up by the absorbents, and in this state it carries into the blood, and through the life channels as a poison, it speeds on and on in its deadly round throughout the entire system. The life current of the dyspeptic is like the stream with a poisoned fountain for its source—it ever bears the bane on its bosom through all its ramifications and meanderings. The body asks for material to replace wasted tissues, and the blood unloads a poison; it asks for bread, and it gets a stone; instead of a fish, a serpent is given. Dyspepsia is a grave disease in any of its numerous forms; but when of the mental or nervous type it is most assuredly a complex affliction—a wheel within a wheel.

No man can enjoy life with impaired digestion. It unfits him for business, dwarfs his intellect, destroys his benevolence, strangles his mirth, baffles his reason, plays truant with his firmness, and transforms him into a tyrannical bigot, or a melancholy whimpering child. At times he has not energy enough to breathe, or like the dozing hound in warm weather, finds it difficult to brush away a fly. At other times the dyspeptie is nervous and excitable; finds fault with his wife and children, and feels as if the hand of every man was against him. You may often see him elasp his hand to his breast and sigh or gasp for breath, while he imagines his time has come to bid vain world adieu. When he walks he wavers and veers from side to side; vertigo and blindness frequently attack him in the streets; he stops, holds to the fence or to a lamp-post in order to keep from falling to the ground, and while in this condition is unjustly stared at by passers-by as a victim of intemperance. When he retires at night he is unable to sleep for hours: the bed seems to him to be floating upon disturbed waters, and subjected to the action of the winds; or he has painful sensations like unto those experienced by persons when falling through space; he dreams horrible dreams, and awakens unrefreshed; his little ehildren shun him because he unwillingly becomes cross to them; and, his wife knowing his irritableness, dreads to see him come home, and is glad when he departs. If the afflieted one be a minister, he selects gloomy texts for his discourses, and preaches long-drawn, melancholy sermons; his very presence chills you and puts your feelings below zero; he delights in singing such dirges as "Hark from the tomb, a doleful sound, mine ears attend the cry." By hearing such sermons from the melancholy dyspeptie, you do not feel elevated; your soul does not soar aloft in the realms of ethereal bliss, and bask in the sunlight of heavenly enchantment; but you feel as if you had an attack of malarial poisoning—as if you were traversing some damp and dismal eavern, where bats and vampires flit about your head, and you could almost hear the wailings of the damned. The physician, if afflicted with dyspepsia, is unfitted for his ealling, by reason of his being too eranky or pettish at times; and, at others, too melancholy to see a patient professionally, or skillfully diagnose a case. What this malady does to the physician, the minister and the business man, it does to all who are its unfortunate victims. It even renders the lives of not a few so burdensome that they seek death by suicide, in the vain hope of bettering their unhappy condition. But few in our day of hurry, bustle, fretting, and impatience ever get eured of this malady once it has got a good hold on them; and fewer still are those who, unaided, are able to note its approach and avoid it. It may be of importance to some to know that vastly more depends upon the patient's own hygienie eare than all else, and that until each sufferer is taught what is essential to his own particular case, there exists not even the show of a hope for his recovery. It is necessary to learn first the origin of the trouble. by avoiding the cause, and observing hygienic laws, with reference to diet especially, you may recover, if you possess a strong will-power, and exercise it by saying and meaning it, I shall get well; but if you waver and neglect your duty, and do the very things which the disease is most likely to cause you to do, by reason of its very nature and depressing influence, God help you, you will never recover. Without your own voluntary cooperation all the medicine and physicians in the world eould not save you.

Among the many eauses of dyspepsia, I might rank excessive brain labor or study as the first, which, if aided by the mental temperament, is most fruitful of this distressing malady. Next, and very nearly abreast of each other, come the habits of immoral excesses, debauchery and intemperance, long continued chewing and smoking of tobacco, excessive physical labor and exercise, as well as absolute indolence, great grief, anxiety and disappointments. These latter three classes enumerated belong among the mental type of classes and are therefore proportionately prominent. Rapid eating and imperfect mastication, together with the making of the eating of the meals more a matter of business than of pleasure. These practices combined are the very prominent cause of what might be termed the business man's bane. Gormandizing and irregularity as to the hours for meals are also very pernicious practices. Many persons eat and searcely know what

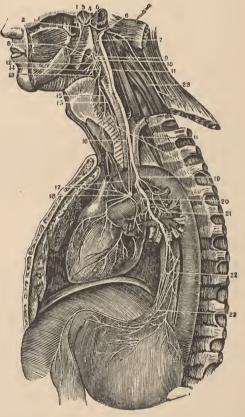
they are eating; they fork or shovel the food into their stomachs as a miller in olden times would grain into a hopper. This, to say the least, is unrefined, if not even barbarous. If it had been intended that man should swallow his food whole, he would have been provided with a gizzard, as are the fowls, where the quantity taken could be triturated with gravel or ground up with other hard substances; but such is not the ease; hence we should thoroughly masticate our food before swallowing it. This is doubly your duty in this region of country, where, as I learn, your beef-'steak is very tough and the consciences of the boarding-house keepers tougher still. Many people have swollen, sore and bleeding gums, decayed teeth, with seurvy or tartar upon them, or it may be no teeth at all. The gums should be healed; the eavernous teeth filled or extracted, and new ones inserted by a skillful dentist, in order that you may thoroughly masticate your food, and remove all possibility of poisoning the secretions from the salivary glands of the mouth.

A normal condition of the stomach must be preserved at all hazards; and to this end we must eschew all improperly cooked food, hot bread, soda biscuits, rancid butter, oleomargarine, poisonous baking powders, adulterated sugar and the like. Sour or spoiled berries and partly decayed fruits are often purchased to be used for food, because they are sold cheap. When we add to these articles of food the adulterated stuffs which we buy and know not of their poisonous quality or condition, we may safely conclude that we are being poisoned at no very slow degree. My friends, the most expensive food you could possibly purchase is unwholesome food; it poisons your blood; ruins your stomach; invites dyspepsia, and often brings on cholera

infantum, or cholera morbus, diarrhea, dysentery, and low types of fever. Much has been said and written about the origin of diseases, and yet but little has been done by local authorities to prevent this wholesale poisoning of the people which I have just referred to. It is true, we have corporation laws, and market-masters to prevent the sale of unwholsome and adulterated food, but of what avail are these? Is a good law of any consequence when it is not enforced? Our marketmasters are neither chemists, microscopists or pathologists; consequently they are as incapable of judging of the purity and wholesome character of food, as an illiterate hod-carrier is to teach astronomy. As a rule, money and other eonsiderations have the wonderful effect of paralyzing or blunting the olfactory and optic nerves of such gentlemen, when adulterated or decomposing articles of food are offered for sale. O, these sales; the ruined health of thousands, and the eriminality of officials! Every year thousands of hogs, eattle and sheep, with tuberculous lungs, liver or kidneys, are slaughtered and sold for food, and yet, we wonder why it is there is so much siekness. Dairymen buy the refuse of starch factories and breweries, the stench of which stuff will sieken you as you pass a wagon loaded with it. This putrid matter they feed to their cows, and then we drink the milk and give it to our children, believing milk to be a wholesole article of diet. Pure milk is a good food, but this stareh factory and brewery slop is not milk but a poison. It gives diarrhea to ehildren and brings sickness and death to all who use it. Equally poisonous and injurious to health is the flesh of hogs and other animals fed upon decomposing garbage, decayed meats and slops of the eharaeter just mentioned. In large eities men make a

business of gathering up the refuse from hotels and other places for the purpose of fattening swine, as I have just mentioned. The majority of people go through life in a listless sort of way; they eat whatever unconscionable dealers or bucksters offer them for sale. the fabled giant that eat his way through the forest, they thoughtlessly and voraciously gobble up everything from frosted potatoes or half rotten apples to the stinking ham or tainted eorn beef; and the worst feature of this carelessness is, that delicate little children are permitted to eat eandies composed of terra alba and sugar, highly colored with poisonous drugs, to please the eye; or they may overload their stomachs oftentimes with the very strongest kinds of food, such as old bacon, boiled cabbage, crackling corn bread, and greens cooked with bacon, and then drink copiously of strong coffee or tea. Is it to be wondered at, I ask you, ladies and gentlemen, that little Johnny or Mamie comes home from school with a sick headache, or wakes up during the night amid the horrors of a nightmare, or before they have attained to the prime season of life they are prostrated and wreeked upon the rock of dyspepsia? The older people have gone through this mill and are now suffering the consequences; and even while groaning with pain, they will not part with habits or give up indulgences that are detrimental to them. Have we not all seen the old pipe take its circuit? Look at everybody with his pipe—the old black pipe, and the old black twist tobacco—as strong as concentrated lye. The chewers and smokers of tobacco, both male and female, keep the glands of the mouth constantly saturated with the poisonous nicotine; then after these and numerous other outrages are perpetrated upon nature; they wonder why it is they do not remain healthy. Is

it any wonder that they sieken and die? or what is far worse, become chronic invalids? But few such people give themselves a thought when in good health, and when siek are most impatient and ever ready to question the efficiency of physicians, neglecting to carry out their instructions and yet expecting drugs and nature to restore them to health, despite their continued bad habits.



A VIEW OF THE DISTRIBUTION OF THE GLOSSO-PHARYNGEAL PNEUMO-GASTRIC AND SPINAL ACCESSORY NERVES, OR THE EIGHTH PAIR. (AFTER ELLIS.)

- 1. The Inferior Maxillary Nerve
- 2. The Gustatory Nerve.
- 3. The Chorda-Tympani.
- 4. The Aurieular Nerve.
- 5. Its communication with the Portio Dura.
- 6. The Facial Nerve coming out of the Stylo-Mastoid Foramen.

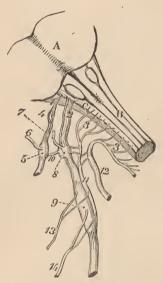
7. The Glosso-Pharyngeal Nerve.

- 8. Branches to the Stylo-Pharyngeus Muscle.
- 9. The Pharyngeal Branch of the Pneumo-Gastric Nerve descending to form the Pharyngeal Plexus.
- 10. Branches of the Glosso-Pharyngeal to the Pharyngeal Plexus.
- 11. The Pneumo-Gastric Nerve.
- 12. The Pharyngeal Plexus.
- 13. The Superior Laryngeal Branch.
- 14. Branches to the Pharyngeal Plexus.
- 15.15. Communication of the Superior and Inferior Laryngeal Nerves.
- 16. Cardiae Branches.
- 17. Cardiac Branches from the Right Pneumo-Gastric Nerve.
- 18. The Left Cardiae Gauglion and Plexus.
- 19. The Recurrent or Inferior Laryngeal Nerve.
- Branches sent from the curve of the Recurrent Nerve to the Pulmonary Plexus.
- 21. The Anterior Pulmonary Plexus.
- 22.22. The Œsophageal Plexus.

From the course of the pneumogastrie nerve and its distribution, you can see the intimate relation existing between the stomach, heart and lungs, and thus more fully understand why it is that dyspeptics often imagine they have heart disease or some disease of the lungs. In this plate you can see the nerve branches leading to the heart, lungs, pharynx and larynx.

The branches from the right side supply the posterior portion of the lung and stomach, and those from the left, the root of the left lung and the anterior surface of the stomach. It can be seen, then, that through reflex action by the pneumogastric nerve and its branches, aided by the great sympathetic plexus, other parts of the body are brought to suffer in sympathy with the diseased stomach of the dyspeptic. The sufferer from this malady complains of pain in the breast, palpitation of the heart, dyspnæa, or a feeling

of suffocation, and very often physicians not well up in pathology and diagnosis eonelude that, instead of dyspepsia, the sufferer has disease of the heart or lungs. I have examined very many whose hearts were sound, but who daily, yes hourly, expected to die from heart disease, most of whom were cured of dyspepsia, and eonsequently of their supposed heart troubles.



- 1. Glosso-pharyngeal trunk.
- 2. Vagus.
- 3. Spinal accessory.
- 4. Jugular ganglion.
- 4. Juginar gangnon
- 5. Petrosal ganglion.
- 6. Jacobson's nerve.
- 7. Aurieular branch.
- 8. Root ganglion of vagus.9. Trunk ganglion of vagus.
- Branch joining the petrosal and upper ganglion of the vagus.
- 11. Small part of spinal accessory.
- 12. Chief part of spinal accessory.
- 13. Pharyngeal branch of yagus.
- Superior laryngeal branch of vagus.

DIAGRAM OF THE EIGHTH NERVE, OR THE PNEUMOGASTRIC AND ITS BRANCHES. (AFTER SMITH AND HORNER.)

As I have previously hinted, I now deelare and propose to show that the mental form of dyspepsia is the worst. Excessive brain labor or anxiety is its eause, and as it is difficult to stop the suffer from thinking and worrying, it becomes a correspondingly difficult form of the disease to treat successfully. Hundreds of our aspiring young men and young women unwittingly lay the foundation for this form of dyspepsia with

shattered nervous systems and the long list of ills that are ever its attendants, and this, too, at a time in their lives when they should be at the height of their glory. Excessive mental activity, then, is the prime cause of this form of the malady we are considering; and as in turn the excitability of the brain, or tendency to think, is intensified by the excessive acidity of the stomach, you find we have a complex trouble, or, as has been already said, a wheel working within a wheel. Oh! how heartrending is a spectacle of this kind. more we think, the more we impair our already weakened digestive apparatus; and the more our digestion is weakened, the greater is our worry, and the more we are disposed, or rather rendered susceptible, to business cares. Every effort of the mind uses up a portion of brain element; and when the stomach fails to digest the food, and material is not furnished through the blood to compensate for the molecular destruction going on in the grey matter of the brain, we must soon suffer for want of nerve power throughout the entire system. I had a patient who died from hemorrhage of the stomach. Almost the entire inner surface was denuded of mueous membrane until the capillaries and veinous radicals were destroyed and the long-suffering dyspeptic bled to death. This hemorrhagic type of the trouble is generally due to long-continued biliousness, or ulcers and cancers of the stomach.

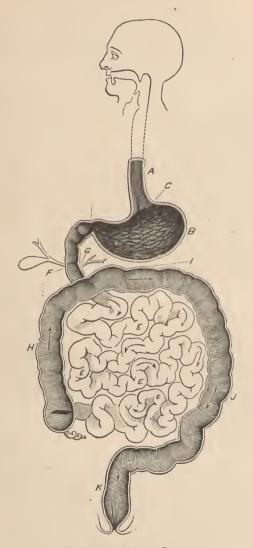
All sufferers from this disease should endeavor to find out the cause, and proceed at once to remove it as soon as discovered. If idleness has had anything to do with your malady, go to work at once; if bad habits, discontinue them; if overworked, mentally or physically, put on the brakes, moderate your zeal. Whatever the cause be, and it must be one of many, avoid

it; stop it; do the reverse. Dyspeptics expect more from nature and medicine than reason or common sense warrants. No sane man can expect to continue in the practices that brought on his disease, and, at the same time, be cured of it. If a person take a dose of arsenic, and you administer an emetic, and the antidote, hydrated sesqui-oxide of iron, thus thwarting the effeets of the poison; and no sooner have you brought about a change for the better than the person again swallows a deadly dose of the same poison, what are you to do or think? You are unable, of course, to bring about a healthy condition of that person so long as he or she persists in swallowing the poison just as soon as you have nullified its terrible effects. Habits and practices that are injurious must be broken off. It is often the ease that persons suffering with indigestion have abnormal appetites. These continue to eat and eat until pain from a distended state of the stomach warns them to desist. Under such circumstances an atonic or relaxed state of the stomach is invariably accompanied by an acid condition, the result of fermentation, and the stomach is converted into a brewer's vat or tub. This excessive acidity of the stomach irritates the mucous membrane of that organ, which gives rise to an unnatural thirst, poisons the blood, depresses the brain, and subjects the patient to a sort of gaseous stupefaction or intoxication, so that he frequently staggers when he walks. With the other forms of this malady we often observe a state of chronic gastritis, inflammation of the stomach, or, at least, an approach to that condition in which the sufferer can not retain food in his stomach, emesis coming on after eating certain kinds of food, and the stomach empties itself of its entire contents. Sometimes these efforts at

ejectment are attended with great pain, convulsions, and sometimes death; although, as a rule, few persons die from indigestion; usually other diseases earry them off. We have another form of dyspepsia, which is directly due to constipation, or a lack of tone and peristaltic action, resulting in engorgement or damming up the bile and consequent impairment of the stomach. In all cases of indigestion, and especially in the bilious form of the disease just mentioned, regularity of the bowels and punctuality in responding to nature's calls should be rigidly observed.

I might observe here, in a general way, that I have seen dyspeptic persons whose hopes and aspirations were so blasted that even life was burdensome to them. What a deplorable sight it is to behold a person in the prime of life all torn to pieces, full of gloomy forebodings, forever anticipating disaster, dejected and continually sighing. When he shakes your hand he gives it a tame, deathly sort of a twist, and you feel as if you were handling the hand of a dead person—beeause of its coldness and elamminess to the touch. His eves appear dull and hazy; he looks at you as if you were but vapor, and he desired to gaze beyond. When answering questions as to how he feels, he describes his long list of real and imaginary ailments as with his last breath. When he tries to walk he has a shuffling sort of motion, and he plods along with his head and shoulders thrown forward; when he attempts to sit down he extends his thin cold hands behind to the ehair or sofa to let himself down easy, as if he were an aged man loaded down with decrepitude. In fact, all dyspepties are starving creatures, whose tissues are not kept up to the standard of health, because of defeetive nutrition.

The stomach is a hollow organ or sack, the alimentary canal being dilated in forming it at this point. It is irregular in shape, and curved upon itself; the lower portion being four times the length of the upper. Transversely, in the adult, it is about twelve inches, and vertically, about four inches; and, according to Clendenning, it weighs about four and one-half ounces. It has two openings, one the esophageal or eardiac orifice, which communicates with the esophagus or meat pipe, which conveys food to the stomach; and the other which we call the pylorie orifice, communicating with the duodenum. At this point there is a little door or valve, whose office is to close against all foods not properly liquified. The food must pass downward when liquified. It sometimes does pass with the protest of this sentinel entered against it; but, after a certain time, up or down, it must go out of the stomach, or the person will have convulsions or apoplexy. Children sometimes have convulsions in this way from over-eating or indigestion. The stomach has four coats: A serous, a muscular, a cellular, and a mucous. The mucous coat contains the gastric follieles, which are situated perpendicularly, side by side, throughout the entire membrane, giving to it a honey-comb appearance. Here also are the mucous and peptic glands, secreting the gastric mucous and the gastric juice, respectively. The arteries supplying the stomach are five in number: The coronaria ventriculi, the pyloric, the right and left gastroepiploic and the vasa brevia. The lymphatics are numerous, and consist of a deep-seated and a superficial set. The nerves supplying this organ, as we have alreadly seen, are the right and left parvagum, or pneumogastric, and branches from the great sympa-



HUMAN ALIMENTARY CANAL.

a, Œsophagus; b, stomach; c, cardiae orifice; d, pylorus; e, small intestine; f, biliary duct; g, pancrentic duct; h, ascending colon; i, transverse colon; j, descending colon; k, rectum.

thetie. The gastrie juice is the solvent of the food. It is colorless, or slightly amber; has little, if any taste, and is acid to test paper. The following table shows the analysis of the gastrie juice of the dog, made up from comparisons from various analyses by Lehman, Bidder and Schmidt:

Water	975.00
Organic matter	15.00
Laetic acid	4.78
Chloride of sodium	1.70
Chloride of potassium	1.08
Chloride of caleium	0.20
Chloride of ammonium	0.65
Phosphate of lime	1.48
Phosphate of magnesia	0.06
Phosphate of iron	0.05
Total	.000.00

In place of laetic acid, Bidder and Schmidt found in most of their analyses hydro-chloric acid. Lehman admits the presence of small quantities of hydro-ehloric acid, but regards lactic acid as the most abundant and important ingredient of the two. The most important element of the gastrie juice, aside from free acid, is the organic matter or "ferment" ealled pepsin, (from the Greek $\pi \varepsilon \psi \iota \varsigma$), eoction, digestion. Dr. Beaumont's table, showing the length of time eertain foods require for digestion, was discovered by him while experimenting upon a Canadian boatman named Alexis St. Martin. This St. Martin had a permanent fistula of the stomach, the result of a gunshot wound. The doctor was a close observer of the process of digestion in this man from 1825 to 1832. He discovered by experimenting that the gastrie juice dissolved food, even out of the stomach, in a bottle at a temperature of 100° F. The required times for the digestion of specified foods are as follows, according to observations:

Articles of food.	Hours.	Minutes.
Pigs' feet	1	00
Tripe	1	00
Trout (broiled)	1	30
Venison steak	1	35
Milk (boiled)	2	00
Roasted turkey	2	30
Roasted beef	3	00
Roasted mutton	3	15
Veal (broiled)	4	00
Salt beef (boiled)	4	15
Roasted pork	5	15

This table of time for digestion is very correct, and will be found to correspond with the experience of all, the only deviation being those arising from temperament and habits, and from sickness also, as this tabulation presupposes good health.

The fats and oils forming portions of our food are not acted upon in the stomach by the gastrie juice; they pass into the duodenum, and are there emulsified by the pancreatic juice, and taken up into the circulation through the thoracic duct. The fats and oils must have passed the orifices of the biliary and pancreatic ducts before the process of emulsification begins. The composition of the pancreatic juice is thus tabulated:

Water	900.76
Organic Matter (pancreatine)	90.38
Chloride of Sodium	7.36
Free Soda	0.32
Phosphate of Soda	0.45
Sulphate of Soda	0.10
Sulphate of Potassa	0.02
(Lime	0.54
Combinations Magnesia	0.05
$ \begin{array}{c} \text{Combinations} \left\{ \begin{array}{l} \text{Lime} \\ \text{Magnesia} \\ \text{Oxide of Iron} \end{array} \right. \end{array} $	0.02
	7.000.00

1.000.00

The panereatic juice is coagulated by heat and also by nitrie acid and alcohol. If brought in contact with oily matter at the temperature of the body, in health 98½° or 99°, it disintegrates or is converted into a creamy-looking fluid. The absorbents take up certain portions of the food, necessary to build up the system, and the blood vessels are also similarly employed. Through the thoracie duet the chyle is earried into the left subclavian vein, thence to the right side of the heart, and to the lungs, where the blood is oxygenated and sent on its rounds to renew the wasted portions of the body. It can be easily perceived, then, that not alone in the stomach, but throughout the entire alimentary tract, digestion and absorption take place. We must not obstruct these processes, especially that of digestion.

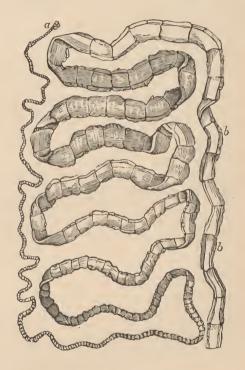
From what I have taught you of the nature and operations of the digestive apparatus, you can not but be impressed with the necessity of obeying at least the general laws governing life and health. Eat nothing but wholesome food; let it be properly cooked; eat at regular intervals, and not oftener than three times daily; do not eat too much nor too rapidly; keep your business, your troubles, your sorrows, your anger, your griefs, your losses, your disappointments, your eares, and the whole brood of such saddening, melancholy vipers, out of your dining-room; say to these pests that they must wait for the second table, as you are accustomed to dine only with your friends. Every meal in the family, or in the boarding-house, or hotel, should be a feast of joy, mirth and good cheer. Conversations on topics of a lively, mirthful and elevating nature should be indulged in; stories and talks as to siekness, sufferings and death-bed seenes should never be allowed at the table. Solemnity and moodiness are equally out of place there, and all such should give place to happiness, flowers, paintings and sunshine. These considerations should form a part of table etiquette, and should be inculcated in the minds of all children. All should observe them more than the labored and artistic use of knife and fork, or even attitude, whether erect or bending over, which position, to be natural, must be easy, not restrained. If these suggestions as to food, its quality, and the quantity and cooking, also the manner of regaling ourselves, are observed, I am confident that much good will result in the way of health.

Touching the quantity, and I might add quality of food for sick or complaining persons, I can not refrain from narrating a true incident. A lazy, gourmandizing, able-bodied farmer was lying around his house complaining of being sick, while his son was plowing corn; he prevailed upon his wife to make him some apple dumplings. She made him six large ones. When dinner was called the son was proceeding to help himself to a dumpling, when the old gent objected and said, "Son, you are in good health, and do not need such dainties; papa is sick and in need of delicacies," and so saying the old gourmandizer appropriated the six. Poor man! what a very delicate fix he was in.

A friend of mine, the late Dr. Benjamin Puckett, of Winchester, Indiana, is responsible for this statement: He said he advised a lady whose husband was convalescing from a severe attack of typhoid fever to give him light, nutritious diet only. The lady, full of good intentions but of poor judgment, at once procured some cracklings and fed them to her husband, cackling all the while, "good cracklings, John, good cracklings;

eat some." John did eat some, and it took him six weeks more to get acquainted with himself.

From eating improperly cooked pork, you can get tape worm or trichina. Much has been recently said in the newspapers and periodicals throughout the world



TAPE WORM. (AFTER HARTSHORNE.)

about these parasites that dwell in the American hog. As I have shown you a cut of the trichinæ in my lecture on hygiene, I now show you a drawing of the tænia solium, tape worm; this worm grows to be from a few feet to several yards in length.

Roast meats should be well done, and steaks should

be broiled, never fried. Avoid hot bread, especially when made with baking powder containing alum instead of cream of tartar. Rich pastry should never be indulged in, especially by those suffering from indigestion; pies, cakes, puddings, pickles and sweetmeats of all kinds are positively injurious to persons with sound stomachs; and those who are already afflicted with dyspepsia can not reasonably hope to improve so long as they continue to outrage their stomachs by such villainous diet. Drink not at all what is now called tea or coffee; but if you must drink, except at the time of meals, let vonr beverage be natural, never alcoholic, unless prescribed by a physician. Beer is often beneficial in the atonic form of the malady if not used to excess. The excessive use of distilled liquors, besides blunting the sensibilities, bringing on stupefaction by poisoning the brain, and preys, most ruinously, upon the stomach by inflaming and burning the mucous membrane. Its excessive use also demoralizes; it degrades and damns a man, converts him into a being lower than the beast. It has caused some of the noblest persons to lie, steal, swear and cheat, aye! even to commit murder and suicide. What we give to our children to eat and drink has much to do with building up their intellect and physique or tearing them down; and yet, how common it is for parents to say, "Let the children have all they want of anything on the table." Do you do this in the ease of your horses or stock? No! you ascertain how much is suitable for them, and then you give them what you consider a sufficient quantity to sustain them and no more, lest they founder as it is termed regarding horses. You never think of the possibility of your dear little children foundering. Parents, do for mercy's sake take as good eare of your

ehildren as you do of your stock. Children often get eolic and diarrhea, and sometimes die from the effects of over eating and drinking. They should be protected from injuries resulting from such practices.

Regularity as to the hours for meals is also a very important consideration; all should endeavor to have their meals at as near the same hour each day as possible. Children who are growing and take much exereise need more food, in proportion, and oftener than adults; and the manual laborer needs more than the mental worker. We need food containing more fat in winter than in summer. A person of the bilious temperament usually eats more than the person of the sanguine temperament; to this, there are exceptions, as a matter of course. The height or weight of the individual has nothing to do in indicating the amount of food needed to sustain life. The people of America eat too much and too rapidly; hence, we are a nation of dyspeptics. We must learn how to eat, work, sleep and recreate, if we wish to escape dyspepsia, or become cured of it, if we are unfortunate enough to be its victims.

The physiology of digestion and the pathology of indigestion I have more than outlined to you. By speech and illustration I have presented to you important truths and professional deductions of great value, should you recognize and practice them. Not only in regard to that serious disease dyspepsia, but touching others also, have I put you on your guard, and suggested as to how you can escape and avoid both the one and the numerous others.

And now, in conclusion, I might add that I need not urge you on in your quest for happiness. This is quite natural to all; but I must caution you against

that listlessness which, in this respect, renders your seekings vain and your desires unrequited. All would eat, but few would work; yet, labor that you may eat, is the law. All would be happy, yet few would live so circumspectly as to be at all times in accord with the couditions to such a blissful state. It is just so with respect to health. Those who suffer pain cry out to be relieved from it, and those only who suffered or are suffering are the ones to rightly appreciate health. With the great masses of mankind, health, though possessed, is a boon unknown; hence thousands are daily trifling with this good gift by throwing the reins upon passion's neck. A good possessed without earning it, and acquired without the exercise of care, is a thing or condition that is cheap—very cheap, indeed.

Now, in this connection, no good thing is cheap. Health is transmitted or is a good gift; but thought, earc, labor, self-denial and patience are the measure of its high price and great worth. Learn the heaven-written laws that govern your being, and if you have been outraging these natural regulations for some time past, so as to become sufferers thereby, go at once to a physician, to the priest of the body, and have your maladies healed and be instructed in the laws of life and of health.

CATARRH (CORYZA.)

THE first matter of interest to an individual not already a sufferer from eatarrh, should be how to ward off its assaults. The feet should be properly clad with shoes or boots with thick soles, both in winter and summer, to protect them from excessive cold and heat; the stockings should not be so heavy as to produce sweating, neither should they be too light; rubber shoes should never be worn in the house or when the weather is so warm as to cause the feet to sweat.

The clothing of the body should be sufficiently comfortable; but too much elothing is very pernicious. Overcoats should at all times be removed when in the house: wraps around the neck are injurious, and favor catarrhal, nose, throat and lung troubles; simply turning up the collar of the overcoat is usually sufficient; but where the person has to take a long ride in the country during cold, and more especially windy weather, or where he has to face a cold north-west wind, it might then be advisable to use a wrap around the neck; but if that be done, it should never be earried to the extreme that is common among our farmers of wrapping long mufflers around the neck until the entire head and face are almost obscured by them. drawers and undershirts should be of flannel, which should be worn both summer and winter, but not too heavy in summer; all of which should be removed every night, and a night shirt or gown of canton flannel

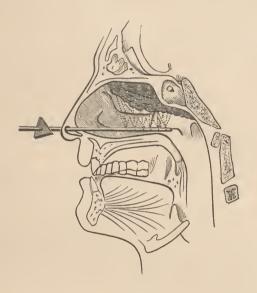
should be worn during sleep. When a person is exposed to the cold, or is compelled to face a cold wind, he should breathe through his nose and talk but little; or if the weather be intensely cold, he should not talk at all. Persons who have weak lungs or are already suffering from eatarrh might with benefit use Jeffries' respirator over the mouth and nose while thus exposed, or when riding against the wind. Standing, sitting or sleeping in a draught, between open windows or doors, or standing in cold weather out of doors any length of time, or with head uncovered, as at the grave during services, as is commonly practiced, is a dangerous exposure. Such reverence is ill-timed and uncalled for, and should be entirely abolished by all religious bodies and secret orders. The practice of baptism by immersion, during the winter, in streams of water, and of cutting the ice for space in which to immerse, can not be too greatly condemned, and no intelligent minister should countenance it for a moment. That thousands are thus immersed and apparently suffer no inconvenience, I frankly admit; but so, also, will you see men daily debauching themselves by the excessive use of alcohol, and yet very many live to attain great age. So also of the inveterate smoker and chewer of tobacco. We find men and women who consume sufficient opium or morphine in one day to kill fifteen or twenty persons, and yet live to be quite old. Every breach of nature's fixed laws are sins for which the violators must suffer sooner or later. It matters not whether a plunge in the water on a winter day, be by immersion, to save the life of a drowning woman or child, or by accident, the outrage upon the physical organization is the same, and may result in

coryza, acute catarrh, or pneumonitis, lung fever, or arouse to action latent tubercles, and send the violators of God's law to premature graves. Religious faith will not heal a wound or arrest an inflammation: neither will it prevent colds resulting from undue exposure or outrages upon the physiological laws. you wish to be Christians, it is just as essential to obey God's laws hygienically and physiologically as it is morally. Ignorance of the laws of God and nature makes bigots and tyrants. Catarrh is so very prevalent that it is deserving of special consideration. Usually the sufferer first experiences a congested or stuffed-up condition of the nose, attended with more or less fever or pain; the eyes weep, and soon the nose discharges a hot, watery secretion, which, in two or three days, assumes a muco-purulent character. This form of catarrh is termed acute uasal catarrh. It frequently attacks the larynx and trachea, producing a cough, and often completes its work of destruction by traveling down into the bronchii, even to the smaller ramifications and capillary air cells. It is then designated catarrhal bronchitis, and when the air cells are implicated, it is termed capillary bronchitis, and at this stage becomes very fatal to infants and the aged. The exudations fill up the capillary air eells, and prevent the oxygenation of the blood, and thereby eut off respiration. It is frequently called catarrhal or bronehial pneumonia. If the sufferer does not die or fully recover from the acute attack, the inflammatory action partially subsides, leaving the mucous membrane and eapillary vessels in a relaxed condition, and a mucopurulent matter is poured out or exercted upon the free surface. Gastro-hepatic catarrh is another form of this disease, and is an inflammation of the mucous

membrane of the alimentary track, implicating the gall duct of the liver, resulting in vomiting and indigestion. with more or less pain. These are the indications of the acute and sub-acute stages of the disease, the sub-acute form is a condition midway between the Acute and the CHRONIC, and prevails when nature is unable to perform a cure unaided. If bronchial catarrh is not arrested by the aid of appropriate remedies, it results in ulceration, attended with a very offensive discharge of greenish pus; the breath becomes so offensive as to make the victims a burden to themselves and obnoxious to family and friends. It has now reached the stage called CHRONIC BRONCHIAL CATARRH, and all persons afflicted with this form of the disease should not be permitted to occupy sleeping apartments with healthy members of the family, or sleep in a room unventilated, or bathe in the vessels used by others; as the matter discharged is more or less infectious, persons in perfect health may become inoculated with the poison thus thrown off. Another danger from this disease is when it attacks the eustachian tubes and implicates the tympanum, drum, of the ear, causing that organ to become inflamed and thickened, leaving the person dull of hearing. Persons thus afflietd often experience a sensation similar to that caused by the explosion of a cap or percussion match near the ear, followed by a roaring noise, or metalic, bell-like sound, which the superstitious call a deathknell or warning of approaching sorrow to some member of the family. It is a warning that you are a sufferer from catarrh of one or both cars, and if neglected, that you may become deaf. Let those sounds you hear be a warning to you of approaching danger to your hearing. The tympana, drums, of your ears are being injured by an insidious foe, and before you fully realize your danger, they will be muffled, and can not respond to the delicate sound-waves, and you will find you are either totally deaf or very dull of hearing. Catarrh frequently attacks the eyes, and also the lachrymal duets, through which the tears flow into the nostrils. When the eye is attacked, it is then termed catarrhal conjunctivitis; if it be the lachrymal duet, it is termed dacryocystitis. The matter of either will communicate the disease to healthy persons. Never use the same bowl or towel used by persons so diseased, whether the disease be in the first, second or third stage—acute, sub-acute, or chronic.

When the lachrymal ducts become involved, the tears flow over the cheeks, the ducts being closed up by inflammation. Abscesses sometimes take place in these canals, and they become permanently closed. When persons become so afflicted they have what is commonly called weeping eyes. This difficulty-is curable if properly treated; but it often requires weeks and even months to effect a permanent cure. Persons thus afflicted should employ an oculist of skill. Those who profess to cure these chronic diseases in a few days, or by a few treatments, are impostors and quacks, no matter whether they are traveling or permanently located with you. If you are afflicted with this disease do not procrastinate, but buckle on your armor and fight for your health, if you do not wish to throw it away.

Chronic catarrh of the air passages of the nose is the form which is the most prevalent. It differs much in different persons, and also in severity; some have it for years in a very mild form, whilst others are greatly afflicted with it, because of the disgusting discharge of a very offensive character, and of a greenish yellow color, sometimes almost like water; whilst in others it is thick like *pus*—matter, and stains white linen. Again, the discharge may be in the form of greenish scabs, a complete or partial cast of the nose dry on its inner surface, and purulent on its outer sur-



CHRONIC NASAL CATARRH. (AFTER ROBINSON.)

Treatment of chronic nasal catarrh, with the douche spray attached to Geo. Tiemann's universal douche.

face. This form is of all the most distressing, as it is frequently quite difficult to bring the scabs away by blowing the nose. I have seen eases where those scabs were over an inch long and hollow, a complete shell or cast of the mucous tract, and so offensive that flies would follow the sufferer; and yet I have treated and cured such cases; but it often requires from six months

to three years. But few will continue the treatment sufficiently long to overcome this loathesome and disgusting malady. Ulceration often supervenes, and the vomer partition of the nose is eaten through, the nasal bones become necrosed, diseased or dead, and eome away, permitting the fleshy part of the bridge of the nose to flatten. This is a great misfortune, resulting in grave and permanent deformity. I do not think that persons free from strumous taints, such as serofula. tuberculosis, or syphilis, will often suffer to that extent, yet such may be possible. When the disease assumes the form I have described it is frequently called ozæna, a word derived from the Greek ozawa, meaning offensive breath from the nose. In this form of the disease constitutional or alterative remedies are absolutely essential, while local remedies must be used to correct the fector—bad smell, as well as the ulceration, all of which will be fully explained in the lecture on the treatment. This catarrhal trouble also at-·tacks the cavities of the superior maxillaries, known as the antrum of Highmore or maxillary sinus. When such is the case, the patient frequently experiences pain in the cheek bones and neuralgia of the teeth of the upper jaw.

We have still another form of catarrh, which is almost free from any secretion. The sufferer complains constantly of a parched or dry feeling in the nose and throat. In this form of the malady, the *lachrymal ducts*, or tear passages, leading from the inner corners of the eyes into the nose, are diminished in size, through a thickening of the walls, by the catarrhal inflammation. It is common 'to find such persons suffering from chronic sore and red eyes, and the tears flowing over the cheeks. In such cases the catarrhal trouble must

be treated and the nasal ducts frequently opened with probes; this treatment can only be accomplished successfully by a surgeon of experience, consequently I will not attempt to give directions how to proceed in such delicate surgical treatment. 'Children suffering with this dry form of the malady do not breathe through the mouth as they commonly do in the other forms where the passages are partly closed.

Thousands die annually from this fell disease, some not knowing its fatal nature, whilst many others neglect themselves to save the almighty dollar, until it is too late, and the undertaker gets the money. Had they employed a good physician they could have prolonged their lives. These same shortsighted misers will pay out more money annually for tobacco to chew and smoke than it would cost to make a permanent cure, and this too in the face of the most direct and positive proof that the use of tobacco in any form increases the virulence of the disease. It is strange but too true that people as a rule, will risk their lives over and over again rather than pay a physician to cure them.

TREATMENT IN ACUTE CATARRH.

The treatment in mild eases is very simple; drink a cup of hot ginger tea and take from five to ten grains of Dovers' powder or hot lemonade containing a table-spoonful of good whisky, on retiring; in the morning take two tablespoonfuls of Roehelle salts or four (F 3) pills. In an ague or malarial district quinine or (F 12) should be given; to aged persons, where the patient is feeble, ammoniæ may also be given as follows:

R	Ammoni muriatiei3	i.
	Tinet. sanguinariæ3	i.
	Vini ipeeae anuhæ3	i.
	Aquæ destillatæ3	iv.
	Syrupi tolutaniad3	iii.

M. Signæ: A teaspoonful every hour, or when quinine is also given, every two hours, giving two grains of quinine every two hours between the doses of the mixture; or in place of the above mixture give (F4) in teaspoonful doses every hour.

TREATMENT OF CHRONIC BRONCHIAL CATARRH.

In treating chronic catarrh, a lung and general tonic must be given. Give (F 4) in tablespoonful doses, or

R	Ammoni muriatiei	·zii.
	Sanguinarinæ nitratis	.grs.ij
	Tincturæ einehonæ eompositæ	.žiii.
	Aquæ destillatæ	·3ss.
	Syrupi tolutani ad	zvi.

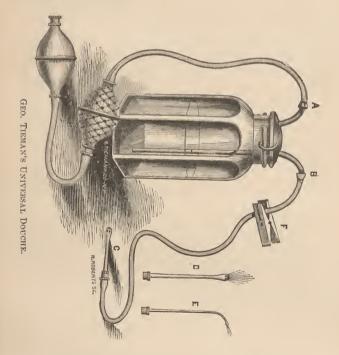
M. Signæ: A dessert spoonful every two or three hours and use a snuff (F8) every two or three hours, with powder blower, and where the patient (expectorates) raises much phlegm or matter, an atomizer should be used to convey the medicine in the form of vapor, directly to the diseased bronehial tubes of the lungs; one such as represented by the cut is sufficient for all ordinary uses. Use the following solution:

R	Sodii benzoiei
	Tincturæ sanguinariæ3ii.
	Glyeerinæ puræ
	Aquæ destillatæadāvi.

M. Sig: Fill the bottle and and inhale the spray twice a day.

Keep the bowels regular with (F 3) pills as needed or Roehelle salts; bathe regularly, eat regularly, be temperate in all things; sleep in a well ventilated room with sufficient bedding, kept clean and well aired; never spit on the floor, always in a vessel which should be cleaned every morning. Much depends on hygienic eare, with great perseverence, to overcome chronic

catarrh; if the patient has constitutional syphilis or tuberculosis, a cure is impossible. Agents to give relief and make life more endurable is all that can be looked for. Persons suffering with catarrh as also comsumptives would be benefited by going to a warm climate in the winter.



TREATMENT OF CHRONIC NASAL CATARRH.

The treatment of chronic nasal eatarrh eonsists in antisceptics and curatives locally and alteratives and tonics internally. To correct the offensive breath, permanganate of potass and earbolic acid are both good agents; take five grains of permanganate of potass to a pint of lukewarm rain water, use with a fountain syringe

or Tieman's Universal douche twice or three times a day, or a spray, which is much better; this will not only correct the feetor, but will also soften the hard crusts which frequently form and prevent the annovance of blowing them away in a foreible manner, which is very annoying and often painful; it is necessary to keep the ulcerated surface free from those scales or scabs, by the free use of warm salt water, and the remedy just mentioned; then use a snuff (F 8) every three to six hours, snuffing into the nostrils or applying with a powder blower. If there is any syphilitic taint, take two drachms of iodoform, one-half drachm of tannie acid, one drachm of sanguinaria canadensis, mix thoroughly and use as a snuff every three hours. This treatment must be continued often for months before much improvement is experienced or a cure can be expected. I can also recommend the following:

\mathbf{R}	Acidi carbolici
	Boracis.
	Sodii bicarbonatis
	Glycerinæ
	Aquæ
M.	

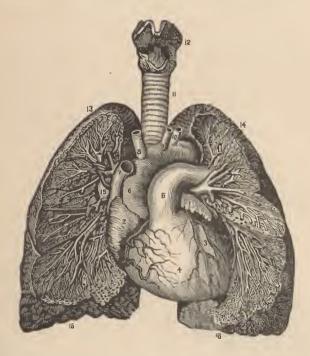
This is from the celebrated Dr. Dobell, of London; it is used with an instrument by which you can spray the entire cavity and soften and wash away all secretions and it should be used once a day until the seabs cease to form, then every second or third day; the use of this instrument is much better than the douche. In using the nasal douche, should the patient swallow whilst using it, it causes a pressure into the custachian tubes and may rupture or seriously injure the tympanna—drums of the cars, and cause deafness; therefore I would advise the use of the spray as much more safe

and beneficial; the perforated catheter can be applied to the fountain syringe and used as well as the nozzle for the douche.

Bathing is of great importance, and as a rule the bath should be cool-not warm and relaxing-sponging off the body every morning, or second morning, should be practiced. The water should not be warmer than 80° Fahrenheit, and by use you may even accustom vourself to bathe at the temperature with which it comes from the well or faueet; but it should not run lower than 65° as a rule. There are those, however, very sensitive to cold water, and also those suffering with heart difficulties who might be injured by cold baths below 80°. To such I would say, do not attempt bathing in cold water without very gradually accustoming vourselves to it, and even then it would be best to consult a good physician, for some may never be able to accustom themselves to the cold bath without danger. In using the eold bath you should first bathe the face, neck, hands and arms before going over the body. But little time should be employed in the bath, and it should be invariably followed with brisk rubbing. Where the person is delicate with a poor circulation it should not be attempted; then it should be commenced very gradually, lowering the temperature half a degree every second or third morning, both of the water and the room; but should there be a poor reaction it should be discontinued, unless it is used under the direct supervision of a physician.

PHTHISIS PULMONALIS; OR, TUBERCULAR CONSUMPTION.

We have three varieties or forms of consumption: Acute, chronic and latent. Consumption may begin after an attack of lung fever or bronchitis, and it frequently follows measles, searlet fever and small-pox. The first symptoms may be hemorrhage or spitting blood from the lungs, after which follows cough, loss of flesh, night sweats, general debility and loss of appetite. The patient begins to have chills and fever, with a heetic blush on one or both cheeks, usually in the afternoon; arrest of the menses in the female, and toward the last diarrhea and dropsy of the feet and legs. The spirits of the patient are usually eheerful and hopeful of life to the very last. Usually there is very little pain, unless the disease is attended with pleuritis, then there is severe lancinating pain and difficulty of breathing, with great anxiety of expression. Professor Chappman gives the following description of consumption in its advanced stage: "The cheeks are hollow; the bones prominent; the skin arid; the nose sharpened and drawn; the eyes sunken, with the adnata—whites of the eyes a pearl color, destitute of vascularity—blood; the lips retracted, so as to produce a bitter smile, and the hair thinned by falling out; the neek wasted, oblique, and somewhat rigid or immovable; the shoulder-blades projected or winged; the ribs naked or exposed, with diminution of the intercostal spaces, and the thorax apparently narrowed; the abdomen flat; the joints, both great and small, seemingly enlarged, from the wasting of the integuments; the nails livid, and occasionally incurvated; the extremities ædematous; the augular points on which the



BRONCHIAL TUBES AND BLOOD VESSELS OF THE LUNGS. (AFTER HARTSHORNE.)

1, left auricle; 2, right auricle; 3, left ventricle; 4, right ventricle; 5, pulmonary artery; 6, arch of the aorta; 7, superior vena cava: 8, arteries of innominata; 9, left carotid artery; 10, left sub-clavian artery; 11, trachea; 12, larynx; 13, upper lobe of right lung: 14, upper lobe of left lung; 15, main trunk of the pulmonary artery; 16, lower lobes of the lungs.

body rests protrudes through the skin; the whole attended with a most afflicting eough, apthæ, sore throat, difficult deglution and feeble whispering voice, or entire extinction of it."

It is useless to enlarge upon the symptoms, as the disease is so common as to be understood by all, and one worthy of the most serious consideration of all mankind. It is a disease that is usually looked upon as being incurable; a disease which when it has attacked its vietim friends and acquaintances shake their heads and say it is of no use, Mr. - is doomed; it is only a matter of time until death will elaim him as his own; and too often the physician makes no attempt to arrest the disease, but contents himself by giving palliatives, and especially neglects the all important matter of shielding a wife and children from danger, by advising them not to inhale too much of the poisonous matter or exhalations from his lungs, or of sleeping in the same room, and especially in the same bed, which is commonly done by the poorer classes, with whom rooms and beds are scarce. It is indeed, no wonder that many families die off, when we consider how many violate nature's laws, through ignorance, filth and negligence. The abominable food that many eat, such as impure milk, diseased meats, adulterated sugars and baking powders, are injurious, and, in faet, almost all articles of food are adulterated and tend to engender disease and court death, because of their impurities.

You will find it to be worthy of your most serious consideration, when you learn that about seventy thousand (70,000) human beings die annually of consumption in the United States, making about ten per cent of the total death rate. The question I wish to fix in your minds for discussion and investigation is, Is consumption contagious? I believe it to be contagious, and that it is frequently contracted by perfectly healthy persons through sleeping with those who are afflicted

with the disease. And again, it may be acquired by eating food in which there are tubereles. It is not generally known that eattle are quite as often afflicted with this disease as the human race is. Our dairymen furnish us milk from eows that have tubereles: our butchers palm off on us their tuberculous meats, and we suffer that they may enrich themselves at the cost of our health and often our lives. The wretched stalls in which dairymen usually keep their cattle, and the disgusting refuse from starch factories with which they feed them, all have a tendency to disease them and develop tubercle; swill milk is an abomination, and instead of being wholesome for children, is absolutely injurious to an alarming extent. Every summer thousands of children perish of diarrheas produced by eating unwholesome food, and especially from the use of swill milk.

In searching into this matter, I have conversed with leading butchers from various large slaughtering houses in cities, and they one and all admit that abseess of the lungs and liver are very common; the result of tuberculosis. The public, not knowing this, consumes this diseased meat to a dangerous extent. As stated in a former lecture, we find the tape worm in the beef, and in the pork, the tape worm and trichina.

The question naturally arises, how shall we know what to eat and drink? As to drink, do not use milk in your family when you have doubts of its purity; try and learn something of your dairyman's method of feeding and earing for his eattle; visit his dairy and see his eattle. As a rule, if they are fat, sleek, lively and free from eough, they are sound. Make sure they are fed on wholesome food, for if they are not you risk much

in eating their flesh or in drinking their milk. Milk can not be pure if the food is of an impure character.

The kind of meat to eat is not a question of so much importance as the quality; and if you will eat pork, in any form, be sure it has been raised on a farm, well cared for, and corn-fed in place of swill or offal from starch factories, breweries or cities. But to those of you who have neither the time nor the means to govern your choice of food, your only refuge is to do all in your power in this direction, and bend your energies and exert your influence to elect law-makers and officials who will make and especially enforce laws requiring and compelling all butchers to have their cattle, sheep and hogs inspected, and those found to be diseased in any way condemned. By the enforcement of such laws, we may with more safety use meat and milk. That tuberculosis can be acquired by eating tuberculous meat is unquestionably true; and the experiments I shall relate certainly prove it beyond a doubt. I know, from personal observation, that families of uncleanly habits, where bathing is neglected or never thought of, the members of which live upon unwholesome and improperly cooked food, are the ones who are the most afflicted with tuberculosis and scrofulous sores and ulcers about the neck and body. That persons can contract consumption by eating diseased food, by inhaling the breath of persons so diseased, and by living in damp, filthy, illy-ventilated apartments, is sufficiently proven beyond doubt or controversy.

I will give you a few reliable reports, by which you may be guided in arriving at a correct conclusion. Assertions are of little power, unless backed up by the

proof and faets. These I shall proceed to give you in the course of this lecture.

There are two theories discussed, at this time, in relation to the cause of phthisis pulmonalis. The first theory supposes an altered condition of the blood, originating in a perversion of nutrition. This condition is believed by some to be due to vitiated air, and to eating diseased meats; by others to imperfect assimilation of food; and by still others to an hereditary taint. The second theory regards it as the result of increased cell development, or a new growth; but it would be useless for me to burden you with the different theories advanced as to its origin and eauses, further than is necessary to warn you against laying yourselves liable to acquiring it; or, if you have it, to inspire you with hope and courage—to give you advice how, with proper eare and treatment, you may possibly overeome it. I know that very many of my readers, and perchance some of you who may have read much upon the subject, but are old fogies and behind the times, will sneer at the idea of this disease being eurable under any eireumstances; nevertheless it is a fact that many eases of consumption may be cured if treated properly. I will quote from John Hughes Bennett, M. D., F. R. S. E.: "Phthisis Pulmonalis, up to a comparatively recent date, was not only regarded as a very dangerous disease, but as one which was uniformly fatal. At present, so far from phthisis being considered to be uniformly or even generally fatal, it is admitted that treatment can, in a great majority of eases, prolong life, whilst in many, the number of which is annually increasing, a complete and permanent cure may be effected. This revolution in our prognosis of the disease is due—

- "1. To the facts arrived at by morbid anatomy, which discoveries are due to repeated post mortems.
- "2. To a more perfect theory and pathology or knowledge of the disease; and,
 - "3. To the more rational mode of treatment.

"In my work on Pulmonary Consumption will be found full details of the arrest of the disease in its most advanced stage, the individuals not only being alive still, but having enjoyed excellent health since their recovery, for periods varying from ten to twenty-five years. I confidently look to the future as affording means for demonstrating the ratio and conditions under which the prognosis of phthisis may be determined.

"In the meantime, I can only express my convictions that its permanent arrestment and cure is by judicious treatment and hygienic management, becoming every day more frequent and more widely extended.

"In the earlier periods of phthisis the prognosis should be guarded, but yet we should encourage such patients; the more slowly it advances, the less fever and emaciation, and the better the appetite the more probability exists of an arrestment of the disease. In the second stage the favorable symptoms are limitation of the disease to one lung, dullness not extensive and not increasing rapidly, expectoration moderate, emaciation not great, appetite fair, and able to take exercise. The unfavorable symptoms are just the converse.

"In the third stage the favorable signs are the existence of a cavity in one lung; the expectoration and gurgling gradually diminishing and the cavity becoming dry; the other lung being sound, or slightly affected and without a tendency to extend." It must be plain to you when such an authority as J. Hughes Bennett claims to have cured many cases, that it is neither quackery nor misrepresentation to state that many cases of consumption can be cured if properly treated, and that, too, in all of the three stages. But of course the chances for recovery are not so great in the second, and still less in the third stage. However, cases are on record where patients in the third stage have been cured. The treatment up to a recent date has been almost entirely palliative and not curative, usually just the reverse, the remedies generally employed to palliate and relieve the unfavorable symptoms creating more indigestion and atony of the stomach from their nauseating and anodyne influence.

This disease, above all others, needs a tonic and stimulating course to build up the digestion, and tone up the entire circulatory and absorbent system, thereby aiding nature to build up, not thwart and tear down. by the administration of disgusting or sickening expectorants, which very many physicians prescribe. The many patent compounds being of the same nature in their effects, expectorants and cough mixtures are not only useless, but injurious, and should never be given. All persons who have consumption by heredity should ever be on the alert; live moral and temperate in all things; observing regular habits; eating wholesome food; bathing every other night in summer, and at least twice a week in winter, and in a properly heated and ventilated room. Never by any means bathe in water cold enough to chill you, or in a room uncomfortable in temperature. When you have a slight eough, do not neglect it, but at once use such tonics as will give you relief, and in many cases perform a permanent cure, of which I will speak farther

on. Thousands die annually with consumption who might have been saved had they consulted a well qualified physician in time, and followed his advice to the letter. I warn all who are in the incipient stage of this disease, or who have a slight cough, and feel weak and languid, accompanied by failing strength, loss of flesh, and loss of appetite, to go at once and consult a good physician. The belief that consumption, in all cases, is incurable, I know to be fallacious and untrue.

Why should a tubercle in the lungs be impossible to heal, when the healing of scrofulous or tuberculous sores in any other part of the body is of every day occurrence? I believe that thousands die of this disease from want of invigorating exercise and pure air. They sit around and think and fret themselves into premature graves; the constant drain upon their nervous system having finished the work. When too late they exclaim, why did I not follow out my physician's orders? Why did I not seek a change of climate? In England, France and in the United States consumption is found in the luxurious homes of the wealthy, as well as in the homes of the poorer classes, and in both it is the result, to a great extent, of exhaustion. The wealthy are prematurely worn into it. while the poor are starved and frozen into it, or insidiously drawn into it by the noxious air they breathe and the impure food they eat. "Civilization is the agent of consumption; the fearful death rate from this disease our city reports attest." We hope a few more years will see a marked change in the treatment of this dread malady, and that a physician when called to attend a person who has consumption, or is threatened with it, will take hold of the ease as earnestly as though it were a fever.

The frequent use of the bath, with plenty of exercise, good nourishing food, proper ventilation, the rooms of the patient perfectly clean, attendants watchful to aid the physician in his efforts, and the physician watchful to note every change, with a determination to get his patient well, and not to follow in the old groove by giving his patients medicine to keep them quiet simply, and to merely relieve the cough, and wait for the King of Terrors to relieve him of the poor sufferer. Inspire your patient with hope and fear combined; and you who have only a simple cough do not neglect it, or trifle with it, for it may be the advance agent of consumption, and death.

The consumptive is full of hope, but, unfortunately, seldom makes the proper effort to get well, and is almost invariably grasping at shadows, by jumping from one patent nostrum to another, or constantly changing physicians. Such practices must result in death; how could it be otherwise? Diet is of great importance in this disease; vet few eat properly or enough, but claim they eat heartily. By all means let the diet be generous. Cream, boiled milk, from healthy cows, that are fed on wholesome food, eggs, butter, toasted bread, and all kinds of meats, but only from animals that were sound and healthy, also fresh vegetables and farinaceous puddings. The cooking must be well done and palatable; poor and slovenly cooks, by their pernicions system of cookery, help fill our cemeteries; and yet, alas! how few good cooks are to be found; often the mistress of the household being as ignorant of the art of cooking as the servant. Mothers, teach your daughters how to cook; it will not degrade them. If you do not thoroughly understand the art, purchase one of the many good cookery books that are now before the public, and

which have been published by women thoroughly conversant with the culinary art, from the plainest prepared food to the most delicate and tempting. In teaching them the art you benefit your family, and may be the means of prolonging life. A wife that is a good cook is a pearl of great value to any man, provided she is a good wife in other respects also. She may not prepare the meals for her family with her own hands, but she can look well to the ways of her household, often instructing heedless or ignorant servants in the preparation of meals; and when the family are gathered around the board enjoying a well prepared repast, how pleasant must be her thoughts as she looks upon their healthful and beaming faces to see the result of her efforts to make her dear ones healthy, eheerful and happy. But reverse the ease, and then look upon the wry faces which prove more plainly than all else that the mother is either ignorant of her duties, is a slattern, or detests the mysteries of the culinary art. In either case it amounts to the same thing, as the results are the same. Accomplished she may be. She may sing and play divinely; she may be a writer or a literary scholar; she may be able to draw or paint; but ean any or all of these accomplishments make up or compensate for a lack of good housekeeping, or make home happy with half-cooked biscuits and potatoes, burned meat, food not properly seasoned, coffee and tea cold—in fact, nothing fit to eat? Oh! what a happy family, with its dyspeptic and weazen-faced children, who are always fretting and quarreling. The mother nervous and irritable drives them into the nursery or out into the street, while the husband goes down town to the lunch-house to get a good meal, and smile at the well fed and blooming waitresses. I

think I hear some exclaim, is eating the soul of wit or of intellectual enjoyment? Most certainly not. But if you wish to get all the good out of life there is in it, you must have a sound mind in a healthy body. Your food must be wholesome, nutritions, and, above all, properly cooked. These, with proper mental culture, morality, benevolence, mirthfulness and a settled determination to do right, will make this life one of joy and happiness, despite the storms which beat around your domestic hearth or business avocations. But I have disgressed somewhat from my theme, by the desire to impress upon you the importance of living a proper way, in order to be healthy and happy.

I will now return to the subject of my disconrse, and eite to you a few cases that I think fully support my assertions, as to the possibility of contracting consumption, to substantiate which I name some very eminent physicians and pathologists, who have entertained such views, some of whom are still living, and who believe the disease to be more or less contagions, and that it can be acquired through eating the tuberculous flesh of animals slaughtered and used as food.

Zürn, of the Jena Veterinary School, fed pigs first with the milk, and then with the flesh of a phthisical cow, and produced the various degrees of tuberculosis in them.

Bollinger, of the Zurich Veterinary School, has made nineteen successful experiments, which led him to the following conclusions:

- 1. Tuberculosis matter obtained from man and inoculated in the dog, produces a typical miliary tuberculosis of the pleura, lungs, liver and spleen.
 - 2. The herbivorous animals are affected (by inocu-

lation) in the peritoneum and messentary glands of the bowel.

Klebs has produced tuberculosis by giving animals milk from those which were diseased, and his experiments, therefore, have an extremely important bearing. In addition to rabbits and guinea pigs, he accidentally induced the disease in a dog by feeding it with the milk of a cow in the last stage of consumption.

The results of his experiments led him to the conclusion that the use of the milk of a tuberculous cow always produces tuberculosis, which commences as an intestinal eatarrh, and there assumes the form of tubercles in the mescenteric glands. It afterward affects the liver and spleen, and subsequently the thoracic organs. He asserts that tuberele is present in the milk of phthisical cows, whether they are slightly or gravely affected, and that it chiefly exists in the serous portion, as when milk has been so filtered as to deprive it of its solid partieles, the fluid portion appears to be as active as when the malady had reached an advanced stage in the animal from which it had been procured. He is further of the opinion that the malady may be developed in children, born without any tendency to it, through the medium of a phthisical nurse or the milk of a phthisical cow.

Reynolds' System of Medicine, American ed., vol. 2, p. 117: "The only two midwives practicing at Nuremberg, a healthy little town of 1,300 inhabitants in 1875, were R. and S. Of these, the woman S. was undoubtedly the subject of phthisis, with abundant puriform expectoration. In the first case described, Dr. Reich delivered the woman by turning the child. While his attention was engaged with the mother, he noticed that, owing to some difficulty in the child's

breathing, the nurse S. sucked the mneons from the infant's mouth, and also endeavored to promote respiration by blowing into its mouth. For the first three weeks the child progressed well; but then its health failed, and within three months after its birth it died of well marked tubercular meningitis, initiated by symptoms of bronchial catarrh. In May and June following, two more children died of the same disease. These three eases had been attended by the nurse S. Dr. Reich's attention being thus attracted, he found, upon investigation, that between April 4, 1875, and May 10, 1876, seven children, in addition to the above three, had died-all within the past year-of tubercular meningitis, although in no case was there any history of hereditary tuberculosis. That all these cases had been attended by the woman S., while of all the eases attended by the other widwife, R., not one had died of this disease, nor had any manifested in any way indieations of any tuberenlar form of disease. The duration of the illness varied from eight days to three weeks; whereas, of the ninety-two children who died in their first year during the nine years from 1866 to 1874, only two died of tubercular meningitis; and similarly among the twelve infants who died in 1877, there was only one such ease, and its parents were tuberculous. The midwife S. died of phthisis in July, 1876. It was ascertained that the midwife S. had been frequently in the habit of sucking the mucous from the mouth of infants, and also of earessing and kissing them." So much for diseased midwives, wet nurses, and promiseuous kissing. Promiseuous kissing should never be indulged in or tolerated. It is a means of infeeting healthy persons with disease, often of an ineurable nature, and its influence upon

the morals is bad and often attended with serious results. A kiss is often worse than a thrust of the sword or the sting of an adder. Judas betrayed Christ by a kiss, and thousands of innocent girls are betrayed and ruined by promiseuous kissing. Beware as to whom you kiss, and let your osculatory favors be bestowed upon those only who are near and dear to you, and not even upon such if they are sufferers from contagious forms of disease.

Dr. L. MacDowell,* of Flemingsburg, Ky., reports the following case as coming under his observation. He says:

"I knew a man who had all the external appearance of a tubercular diathesis, who married a healthy girl of eighteen. In three years—after the birth of her second child—she died of tuberculosis. He married again, in a year and a half, an exceedingly robust woman, of a family without taint. In less than two years she died of unmistakable pulmonary consumption. The third time he married a healthy woman. He himself died in one year after his third marriage, of consumption, and his widow followed him in six months, with the same disease."

(Touchard* These de Paris, 1860, p. 37):

A woman died of tubercular consumption of the third stage, having slept with her husband to the last. The latter, of an original sound constitution, and belonging to a family in which there had never been consumption, took for a second wife a woman of an equally strong constitution, and of healthy parents. After eighteen months of wedlock he yielded to a pulmonary consumption of the worst kind. The second wife continued to sleep with him until his death.

^{*}Herbert C. Clapp, M. D.—Is Consumption Contagious?

A short time after she married again; but, two years after this second marriage, she died of consumption. Her second husband perfectly robust and belonging to a family which had never known an instance of consumption, yielded to this affection some time after the death of his wife. This happened at Haynin, Belgium.

Hermann Webber, on the communicability of consumption from husband to wife, in Clinical Society's

Transactions 1874, vol. vii., says:

"I had seen his mother, two brothers, and a sister die of pulmonary consumption, and had himself on two occasions had hemorrhages, when twenty and twenty-one years old. He became a sailor, and was apparently in good health when he left home, in his twenty-fifth year. He married at the age of twenty-seven. He married four wives:

1. A woman belonging to a perfectly healthy family. She enjoyed excellent health until her third pregnancy, when she began to cough and grow thin. She died of consumption after her third confinement.

2. At the end of a year he remarried, the second wife having every appearance of health; but at the end of a year of conjugal life she began to cough and

spit blood and soon died of quiek consumption.

3. The third wife belonged to an exceptionally healthy family, consisting of a father, mother, four brothers and two sisters, all living and in good health. When married she was twenty-five years old, and continued to have good health until her second pregnancy, when she began to cough and have feverish turns. She had two hemorrhages, and when I saw her seven weeks after her second confinement, she showed extensive lesions in the upper part of the lungs, also heetic fever and profuse sweats. A month later she was taken

with severe hemorrhage, and died shortly after eight months from the appearance of the first symptoms. The autopsy revealed signs of pneumonic and tuberculous consumption combined, to make use of an expression employed by the late Dr. Addison, who visited the patient with me.

4. The fourth wife, whom I also attended, had not a sign of consumption in her family, and, at the time of her marriage, was twenty-three years old, and in the enjoyment of perfect health. About thirteen months later, three months after her first confinement, which had resulted happily, she began to cough and had a little fever. Then very clearly defined signs appeared; first at the upper part of the right, then at the left lung; moreover, she coughed up blood and had a slight pluritic effusion. She experienced some relief during a voyage she took to Melbourne, but on her arrival there, had a severe hemorrhage, and died a short time after her return to England, nine months after the appearance of the disease. The autopsy showed extensive pneumonic and tubercular lesions in both lungs, as well as tubercles in the intestine spleen and liver.

At two different times, in 1854 and 1857, after the third wife's death and during the illness of the fourth, I had occasion to examine J. His general health was excellent, and he assured me that he did not cough, and merely expectorated a little nucous in the morning. The upper part of the left thorax was flattened, and percussion showed it to be less resonant than the right; inspiration was less distinct; expiration was prolonged, and from time to time râles were heard. He did not marry again, not wishing to expose his choice to "certain death." He was healthy and continued to do active duty as a sailor until 1869, when

he was forced to keep his bed for some months on aecount of a severe fracture; he then began to cough. The upper part of the right lung, which had until then been healthy, became diseased, and consumption developed in the usual way, and caused the patient's death in 1871.

The autopsy showed cicatrization where the disease first seized him and also more recent lesions.

Cohnheim,* the great pathologist, finds that it does not make much difference how the tubercular matter is introduced into the system—whether under the skin, in the pleural or peritoneal cavities, or in other ways, either alone or mixed-provided that it is not decomposed, so that no septic influence will be present. From his experiments, conducted in eonnection with Salomonsen, he decides that the process may best be seen when the matter is introduced into the anterior chamber of the eye of the rabbit. He thinks that in adults the poison is generally inhaled, because the lungs are oftener affeeted than any other organs. When the tubercular masses in the lungs ulcerate, some of the infeeting matter, leaving the lungs, reaches the trachea and larynx, and tubercular deposits may, in consequence, there result; likewise with the pharynx, soft palate, root of tongue, and tonsils. Some is swallowed and infects the alimentary canal, in the different parts of which, as we should naturally expect, infection is found in varying amounts, in proportion to the length of time that the intestinal contents have been retained in them, the favorite seats being the neighborhood of the ileo eæeal valve, the lower part of the illium eæeum, and ascending colon, the upper and lower extremities

^{*}Herbert C. Clapp, M. D.—Is Consumption Contagious?

of the tube being less exposed; soon, by their proximity, the mesenterie glands, and possibly the liver. become infected, and the peritoneum, from deep ulcerations of the intestine. Sometimes, when inhaled, instead of being taken in with the food, before infeeting the lungs, the virus may be directly absorbed by the larynx and trachea, producing primary laryngeal phthisis. If the poison is not inhaled, but is swallowed with the food, the disease is apt to start from the digestive eanal. This is the probable explanation of the reason why young children are more apt to have consumption of the bowels than of the lungs, they being to so great an extent fed on eows' milk. which, if it comes from phthisical cows-which is undoubtedly frequently the ease—is so fraught with danger to our little ones. Certain it is, that in young children advanced stages of disease of the mesentric glands and peritoneum without any, or but slight, disease of the lungs is very common.

Cohnheim concludes that the nature of tuberculosis can best be described by comparing it with syphilis, between which and tuberculosis he discovers at all points the closest analogies: "Everything depends upon the virus," he says; both diseases require, above all things, infection—transmission from person to person. Each must have its specific virus, which must reach a mucous membrane or a broken surface to be absorbed and induce the disease. Each is transmitted by heredity, and, thus transmitted, may lie latent (dormant) for a longer or shorter period of time. It is from the influence of the poison during this latent period in tuberculosis that the phthisical "constitutional predisposition" or "habit of body" arises, which has nothing to do with a mere facility for receiving

the virus, as heretofore supposed. Such individuals are not predisposed to tuberculosis; they already have it, either inherited or early acquired. Everybody is tubercular in whom the tubercular virus has taken root. There is no more predisposition for tuberculosis than for syphilis, although some persons are more easily affected than others; nor is there any constitutional predisposition which causes inflammatory products to undergo the cheesy degeneration in some persons, instead of being absorbed; but only those products undergo this degeneration which are already the products of tubercular virus.

Both tuberculosis and syphilis may disappear from the body entirely and a perfect cure may result; but with either it is not possible to feel sure that even if it is apparently cured, it may not return, and on the other hand most patients will never get the virus of either removed from the system.

Again, whilst both diseases may be inherited, it is also true that both diseases, in the vast majority of cases, are not inherited, but acquired. The following noted men believed it could be acquired: Aristotle, 330 B. C.; Hippocrates, 400 B. C.; Galen, A. D. 180; Valsalva, also his immortal pupil Morgagni, who avowed that he never dared make but few autopsies of persons who had died of phthisis, for fear, as he said, of eatching their disease. He elung to this belief during his entire life, and in one of his letters, written A. D. 1761, we read the following: "As a young man, I used to avoid the dead bodies of those who had died of consumption, and now that I am old, I still avoid them." Dr. Benjamin Rush, of Philadelphia, advocated a similar theory in 1789. Prof. J. M. Da Costa says: "I have met with a number of instances which seemed to

prove the contagiousness of phthisis," and adds that he is a believer in it. R. N. Todd, M. D., Professor of Theory and Practice of Medicine of the Indiana Medical College, of Indianapolis, Indiana, a personal friend of mine, says: "My observations during a period of twenty-four years of active practice long since convinced me that such is the case, i. c., the disease is infectious." His brother, L. L. Todd, an eminent physician, entertains the same views. J. Solis Cohen, an eminent authority on lung and throat diseases, entertains similar views. I now wish to especially direct your attention to Doctor Koch's experiments:

[Letter from Professor John Tyndall to the editor of the London Times.]

"On the 24th of March, 1882, an address of very serious public import was delivered by Dr. Koch, before the Physiological Society of Berlin. It touches a question in which we are all at present interested—that of experimental physiology—and I may, therefore, be permitted to give some account of it in the Times. The address, a copy of which has been courteously sent to me by its author, is entitled, 'The Etiology of Tubercular Disease.' Koch first made himself known by the penetration, skill and thoroughness of his researches on the contagium of splenic fever. By a process of inoculation and infection he treated this terrible parasite through all its stages of development and through its various modes of action. This masterly investigation caused the young physician to be transferred from a modest country practice, in the neighborhood of Breslau, to the post of Government Adviser in the Imperial Health Department of Berlin.

"From this department has lately issued a most important series of investigations on the etiology of infective disorders. Koch's last inquiry deals with a disease which, in point of mortality, stands at the head of them all. If, he says, the seriousness of a malady be measured by the number of its victims, then the most dreaded pests which have hitherto ravaged the world—plague and cholera included—must stand far behind the one now under consideration. Koch makes the startling statement that one-seventh of the deaths of the human race are due to tubercular disease, while fully one-third of those who die in active middle age are carried off by the same cause. Prior to Koch it had been placed beyond doubt that the disease was communicable, and the aim of the Berlin physician has been to determine the precise character of the contagium which previous experiments on inoculation and inhalation had proved to be capable of indefinite transfer and reproduction. He subjected the diseased organs of a great number of men and animals to microscopic examination, and found, in all cases, the tubercles infested with a minute, rod-shaped parasite, which, by means of a special dyc, he differentiated from the surrounding tissue. It was, he says, in the highest degree impressive to observe in the center of the tuberele cell the minute organism which had created it. Transferring directly, by inoculation, the tuberculous matter from diseased animals to healthy ones, he in every instance reproduced the disease. To meet the objection that it was not the parasite itself, but some virus in which it was imbedded in the diseased organ, that was the real contagium, he cultivated his bacilli artificially, for long periods of time, and through many successive

generations. With a speek of matter, for example, from a tubereulous human lung, he infected a substance prepared, after much trial by himself, with the view of affording nutriment to the parasite. Here he permitted it to grow and multiply. From this new generation he took a minute sample and infected therewith fresh nutritive matter, thus producing another brood. Generation after generation of bacilli were developed in this way without the intervention of disease. At the end of the process, which sometimes embraced successive cultivations extending over half a year, the purified bacilli were introduced into the circulation of healthy animals of various kinds. In every case inoculation was followed by the reproduction and spread of the parasite and the generation of the original disease.

"Permit me to give a further, though still brief and sketchy, account of Koeh's experiments. Of six Guineapigs, all in good health, four were inoculated with bacilli derived originally from a human lung, which, in fifty-four days, had produced five successive generations. Two of the six animals were not infected. In every one of the infected eases the Guinea-pig sickened and lost flesh. After thirty-two days one of them died, and after thirty-five days the remaining five were killed and examined. In the Guinea-pig that died, and in the three remaining infected ones, strongly pronounced tubercular disease had set in. Spleen, liver, and lungs were found filled with tubereles; while in the two uninfected animals no trace of the disease was observed. In a second experiment six out of eight Guinea-pigs were inoculated with cultivated bacilli, derived originally from the tuberculous lung of a monkey, bred and re-bred for ninety-five days, until eight generations had been produced. Every one of these animals was

attacked, while the two uninfected Guinea-pigs remained healthy. Similar experiments were made with eats, rabbits, rats, mice and other animals, and without exception, it was found that the injection of the parasite into the animal system was followed by decided and, in most cases, virulent tubercular disease.

"In the eases thus far mentioned inoculation had been effected in the abdomen. The place of inoculation was afterward changed to the aqueous humor of the eye. Three rabbits received each a speek of bacillus culture, derived originally from a human lung affected with pneumonia. Eighty-nine days had been devoted to the culture of the organism. The infected rabbits rapidly lost flesh, and after twenty-five days were killed and examined. The lungs of every one of them were found charged with tubercles. Of three other rabbits one received an injection of pure bloodserum in the aqueous humor of the eve, while the other two were infected, in a similar way, with the same serum, containing bacilli, derived originally from a diseased lung, and subjected to ninety-one days' eultivation. After twenty-eight days the rabbits were killed. The one which had received an injection of pure serum was found perfectly healthy, while the lungs of the two others were found overspread with tubereles.

"Other experiments are recorded in this admirable essay, from which the weightiest practical conclusions may be drawn. Koeh determines the limits of temperature between which the tuberele-bacillus can develop and multiply. The minimum temperature he finds to be 80° Farenheit, and the maximum 104°. He concludes that, unlike the bacillus anthracis of splenic feyer, which can flourish freely outside the animal

body, in the temperate zone animal warmth is neeessary for the propagation of the newly discovered organism. In a vast number of cases Koch has examined the matter expectorated from the lungs of persons affected with phthisis, and found in it swarms of bacilli, while in matter expectorated from the lungs of persons not thus affected he has never found the organism. The expectorated matter in the former cases was highly infective; nor did drying destroy its virulence. Guinea-pigs infected with expectorated matter, which had been kept dry for two, four and eight weeks, respectively, were smitten with tubercular disease quite as virulent as that produced by fresh expectoration. Koch points to the grave danger of inhaling air in which particles of the dried sputa of consumptive patients mingle with dust of other kinds.

"It would be mere impertinence on my part to draw the obvious moral from these experiments. In no other conceivable way than that pursued by Koch could the true character of the most destructive malady by which humanity is now assailed be determined. And, however noisy the fanaticism of the moment may be, the common sense of Englishmen will not, in the long run, permit it to enact cruelty in the name of tenderness, or to debar us from the light and leading of such investigations as that which is here so imperfectly described."

CONSUMPTION.

Treatment 1. Much more depends upon the nourishment, bathing, cheerful surroundings, properly ventilated rooms, especially bed rooms, proper clothing and suitable climate, than upon the medical treatment for a cure in consumption. The patient should bathe every other day during the summer, and at least onee a

week during the winter, in a well heated room, temperature not less than 90° Fahrenheit. The water should be at least 98° to 100° Fahrenheit; the bathing should be done just before retiring, and at least two or three hours after eating. Under no circumstances should a patient bathe with a full stomach; even a person in good health should never bathe immediately after a meal. The consumptive should wear flannel next the skin in winter, and change every week; they should remove all the clothing on retiring, and have two suits of under-clothing, especially to sleep in, always airing and drying the night clothing during the day.

Treatment 2. The bed chamber should be kept at about 55° to 60° Fahrenheit in winter, and ventilated, the windows being dropped from the top about the thickness of a knife blade; but the bed should not stand in the draft either during summer or winter. A box, containing ashes, sand and lime, should be used for the patient to expectorate in, and it should be removed every morning, or if the patient is confined to the house, the box should be cleansed and fresh ashes, sand and lime supplied often. Always avoid the breath of consumptives, especially while they are eoughing; and never sleep in the same bed, or even in the same room, when it is possible to avoid it; it is an imprudent practice and an outrage upon children. Avoid all chances of contracting this malady; let your love for the afflicted be governed by reason and self-protection; do your duty to the sufferer, whether it is husband, wife or child; but remember, it is not at all necessary to sacrifice a life to gratify the selfish whims of another. No consumptive should expect or demand it of any one.

Treatment 3. The patient should retire early and take sufficient rest; but during the day take plenty of exercise, such as walking or horseback riding, when the weather is fit for such exercise, but on damp, chilly days the patient should not leave the house under any circumstances whatever. The food or diet of a consumptive should be wholesome, nutritious and sustaining. Where the patient can relish fat meats they should be used every day, such as fat beef, mutton, and even pork, eream, eggs, oysters, sweet milk and wild game. Pies, eakes and eandies should never be used, they are positively unfit for a healthy person, and, necessarily, very injurious to a consumptive. A small glass of ale, beer, or porter, or a little wine, or good whisky taken before meals will frequently benefit a eonsumptive, and aid digestion; but they must never be used to excess. Where acidity—sour stomach—is troubling the patient, it may be corrected by taking from two to five grain doses of pulverized biearbonate of potassium or (F 1), in teaspoonful doses, every one or two hours until relieved.

Treatment 4. The remedies consist mainly in giving the analeptic—sustaining treatment—pure cod liver oil (Squibbs), in tablespoonful doses, three times a day, after meals, in the same amount of good whisky. Where the stomach will not retain cod liver oil, they should cat freely of good fresh butter—not oleomargarine—and fat meat. When the patient has chills and night sweats, give the following medicine:

R	Quiniæ sulphatis	.Эii.
	Acidi sulphurici aromatici	.ʒi.
	Tincturæ sanguinariæ canadensis	zii.
	Syrupi zingiberis	·žiss.
	Syrupi tolutaniad	Ziii.

M. ft. Mist. Signæ: A dessertspoonful every two hours, or give (F 2) one pill every two hours until twenty are taken, then skip two or three days and repeat as before. For night sweats give of (F 38) one or two pills every night, or cold sage tea, sponge off the entire body with a bowl of hot water, in which you have put two tablespoonfuls of mustard meal and four ounces of alcohol; rub dry with a hot cloth, or give ten drops of muriate tincture of iron three times a day, in water; or ten drops of aromatic sulphuric acid, in the same way; or the one hundredth part of a grain of atropine twice a day.

Treatment 5. For the eough, when it is troublesome, take a dessertspoonful (F. 4) every one, two, or three hours, or the following:

Ŗ	Tincturæ	benzoini	co	mpositæ	3	ii.	
	"	sanguina	riæ	eanadensis		i.	
	44	ictodes fo	etid	a		i.	
	Elix. kal	i bromidi				i.	
	Syrupus tolutaniad Žiii.						
M.				dessertspoonful			or

M. ft. Mist. Signæ. A dessertspoonful every one, two of three hours until relieved.

When hemorrhage occurs, give the following:

Ŗ	Extracti	hamamelisfɔ̃i.
	Extracti	lycopus virginicaf3ss.
	Extracti	ergotæfʒii.
	Extracti	maticofzii.

M. ft. Mist. Signæ: A teaspoonful every half hour or hour.

Consumptives should seek a mild climate in winter; such as Jacksonville or St. Augustine, Florida, Mobile, Alabama, or New and Old Mexico; Colorado is also good in the summer, but great care is necessary not to get too high an altitude. I trust, ladies and gentlemen, you may feel fully repaid in the perusal of this lecture.

My personal friend, W. B. Fletcher, M. D., Professor of Pathology in the Indiana Medical College, also recommends the above points.

Where the sea air is too severe at Jacksonville or St. Augustine, Florida, my friend Doetor F. Stein recommends Sandford, on the western shore of Lake Mellanville, or in that vicinity.

From a classmate and former partner I received the following letter with reference to the climate of New Mexico for consumptives; he having been a resident of Los Lunas, New Mexico, for six years:

Dr. II. S. Cunningham, Indianapolis, Ind.:

DEAR SIR: As a resort for consumptive patients New Mexico is now attracting considerable attention in the Eastern States and elsewhere.

It is only since railroad communication has been established—about a year and a half ago—that the attention of the public has been drawn to the advantages offered by the climate of the territory to consumptives, since which time the number of invalids going to the territory has gradually increased.

The elimate of the central portion of New Mexico is superior to either Colorado or Florida, being more uniform and free from malarial influences. This part, say between the thirty-fourth and thirty-sixth parallels on the Rio Grande, possesses conditions especially adapted to consumptive patients, viz.: a dry atmosphere and moderate elevation—between four thousand to five thousand feet above the level of the sea.

The best proofs of the effects of the climate are the marked improvement in persons affected with phthisis who have visited the territory in the early stages of the disease, and who have resided in the territory a few months, and in the fact that consumption is almost unknown among the native Mexicans, the lower classes of whom are, as a rule, both poorly clad and nour-

ished. These facts have come under my personal observation, extending over a term of six years.

Santa Fe should not be recommended, as its elevation—seven thousand feet above sea level—is too great for phthisical subjects. In the southern portion of the territory malaria exists to an alarming extent, and gives rise, very frequently, to a low form of typhoid fever, the mortality from which is very great.

Yours very respectfully,

ROBT. COSTIGAN, M. D., C. M.

252 Richmond street, Montreal, 13th May, 1882.

HEART DISEASE.

Acute heart disease is usually due to a translation of rheumatism from some part of the body. The different forms of the disease resulting from rheumatism are named pericarditis, endocarditis, and myocarditis. Pericarditis is an inflammation of the membrane surrounding the heart; endocarditis is an inflammation of the lining membrane; and myocarditis is an inflammation of the muscular tissue of the heart. All of these are very fatal in their character; but endocarditis is the one I shall describe, from the fact that it is the one which usually leaves a defective condition of the valves.

The symptoms are pain in the vicinity of the heart, dyspnæa, difficulty of breathing, irregular action of the heart, or palpitation, anxiety, delirium, nausea and frequently vomiting, more or less eough, excessive sweating, and at last we find a dropsical condition of the face and eyes, with coldness and a pale or bluish appearance of the face. As I stated before, these different forms of heart disease are mostly due to rheumatism, but it may also be due to Bright's disease of the kidneys, and also pyæmia—blood poisoning. In endocarditis, during the inflammatory action, there is thickening of the valves through fibrinous exudation, which causes them to elose imperfeetly, thereby permitting the blood to fall back into the heart from the aorta and pulmonary arteries, producing aortie or pulmonary regurgitation. Where such is the ease, great exeitement may produce sudden death. We have many born with weak or defective hearts. We also have oceasionally persons suffering with cyanosis—blue disease—which is caused by the blood continuing to flow from the right to the left auricle of the heart through the foramen ovale, as it did before birth, and not passing through the lungs to become oxygenated. This is due to a failure of the foramen ovale to close up as it should as soon as the child breathes. By this means the venous blood continues to flow through the circulation surcharged with earbon. This difficulty usually results in death in from a few hours to a few years after birth. We also have hypertrophied or enlarged hearts; also dilatation or increase of the size of one or more cavities, which may be attended with either thickening or thinning of the walls. Hypertrophy usually results from regurgitation or a falling back of the blood into the heart, due to defective valves; or it may be the result of over-action of the heart. Aneurism of the great aorta or larger artery through which the blood is conducted through the thoracic and abdominal eavities, is also a cause of hypertrophy. There are many other causes, but they require close study and a knowledge of anatomy to fully understand them. Atrophied or small hearts, if not congenital, but aequired, are usually due to chronic wasting diseases, such as phthisis, eaneer, syphilis and diabetes. "Aecording to Quain, the heart is small in about half the eases of phthisis, and the diminution is rather more frequent in women than in men." [Reynolds' System Med., vol. 11, p. 761.]

We also have another form of heart disease—fatty degeneration, which results from phthisis, consumption,

excessive drinking of aleoholic liquors, and other causes. We have, besides, a sympathetic difficulty of the heart, called angina pectoris, which seems to be an attendant of most if not all forms of heart disease. It is a neuroses nerve pain of the heart, and is especially common in ossification of the coronary artery. Sir Thos. Watson, M. D., considers it especially due to fatty degeneration. It occurs as a general thing in aged people. In attacks of angina pectoris the pain is very severe, and lasts from a few minutes to an hour, or even a day; it is often fatal, and yet persons thus afflicted may live for years. The best treatment in these emergencies is a teaspoonful of Hoffman's anodyne (spiritus ætheris composita), every fifteen minutes until easy; or, better than all else, five drops of nitrate of amyl upon a handkerchief and inhale, holding the handkerchief two inches from the nose. This remedy is very dangerous, and should be used by very judicious persons only, and with great caution. The bottle must be well eorked immediately after dropping out what you wish to inhale. We have still another form of sympathetic heart disease, exophthalmic goitre—Grave's dis-· ease—Bosedow's disease. It may be known by enlargement of the thyroid gland in the neck, excessive palpitation or action of the heart, prominent pulsation of the carotid arteries of the neck, and a prominence of the eye balls.

All the diseases we have just explained, excepting the last named, are termed organic. We have other heart disturbances which we term sympathetic, where the heart is not diseased but excited, resulting in palpitation, fainting fits, and even pain in the vicinity of the heart; yet those sympathetic disorders are frequently believed to be organic by many physicians, and persons are often hourly expecting to drop off their feet dead, when, in reality, there is no real danger or disease of the heart; such eases are often eurable. Sympathetic heart trouble results from dyspepsia, anæmia, poverty of the blood, uterine diseases, nervous prostration, retention of the bile in the blood through malarial poisoning, and enlargement of the liver and spleen, and consumption. All persons suffering with any form of heart disease or trouble should

POND'S IMPROVED
SPHYGMOGRAPH.
PARKE DAVIS & Co., Agents,
Detroit, Mich.



consult a well qualified physician, for, in many instances, they may be cured. All classes of heart disease have the same general symptoms, viz: Palpitation, fainting spells, blind spells or swimming of the head, feeling faint and sick in church or crowded halls, fear of death, feel the motion of the heart when in bed, intermission or irregular action of the heart, and spitting of blood. The use of the sphygmograph is a great aid in determining the amount of difficulty with the heart, and its character also. It is a little instru-

ment which is placed upon the wrist over the radial artery, by which we get what is termed heart writing.

Much more could be said about this class of diseases, but I have given you sufficient information for your guidance. My advice to all persons suffering from heart difficulties is not to become excited, either through



CARDIAC TRACINGS.

Cardiae Tracings show everything taking place in the heart more completely. A normal heart trace is here shown.

grief, anger, or joy; bathe regularly, eat wholcsome food, never too much; do not take violent exercise, either in walking, working or running; and take a sufficient amount of sleep; in short, obey nature's laws. Never indulge in excesses of any kind, and never transcend moderation in the use of tobacco or alcoholic stimulants; indeed, they should be eschewed entirely.



No. 5. Taken from a strong young man, well marked valve action, diehrotism only is seen. More pressure would bring out both curves.

All forms of sympathetic heart troubles are amenable to treatment, and very many, with proper care, may be entirely cured. Many of our young folks are afflicted with sympathetic heart disease, from which they rapidly recover after marriage, at least for a period; it may after a time assume another type caused by disappointed hopes. A very common cause of sympathetic

heart trouble is dyspepsia. I have frequently treated patients successfully who had been pronounced incurable. Uterine diseases in females often produce very alarming symptoms; but when the womb is cured the

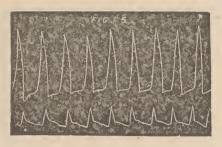


Fig. 5 is a hyperdiehrotic pulse, upper trace taken before giving stimulants; lower trace taken after—showing the beneficial effects.

heart is also cured. Many females are frightened by incompetent physicians telling them they are suffering from heart disease, and many become so depressed and discouraged that they really die from constant anxiety; but few, very few, of our American women are free



The above trace was taken on "aneurismal tumor" of the aorta, a few days before it ruptured.

from some form or other of complaint peculiar to women, consequently they suffer with nervous prostration, indigestion, and palpitation. Most of our girls are not taught to work or exercise properly; and they grow up with small and weak hearts, and can stand but little; they faint easily and have but little energy; or if they have energy they have not heart power and physical force enough to accomplish much, mentally or physically, in life. They are not fit for wives and mothers; they frequently become burdens to themselves and all with whom they come in contact.

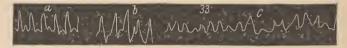


Fig. 33. Dichrotism of disease-fatal case. Typhoid fever.

Weak-hearted men and women are failures in life; they become excited at trifles, can not endure mental or physical labor, and can not face grief or danger. Mothers and fathers, if you want your sons and daugh-



Fig. 35. Extra vibrations as seen in chronic alcohol poisoning, poisoning from digitalis, tobacco, opium, etc.

ters to grow up well developed and intellectual men and women, give them physical exercise every day, but not to excess, that they may develop generally and the heart also become developed and strong.



Fig. 24. Pulse of old age. Senile.

Treatment.—But little can be said of the treatment of these diseases. When any of my readers imagine they have any form of heart disease I would advise them to consult a good physician. Rheumatic endocarditis is a very dangerous disease; it requires the skill of the best physicians to prescribe properly, and

even then but few recover, and when they do, it is usually with thickened and defective valves of the heart. In emergencies I would recommend spirits of chloroform in doses of from ten to twenty drops in water every half honr, or oftener if there be fainting spells; or compound spirits of ether in teaspoonful doses every fifteen minutes, or the following:

R	Spiritus chloroformi3ii.
	Spiritus ætheris compositi
	Tincturæ valerianæ ammoniatæ
	Syrupi zingiberis

M. Signæ. A teaspoonful every fifteen minutes or half hour, in water, until the patient is easy. Loosen all the clothing, lay the patient prone, head on a level with the body.

WOMEN AND THEIR DISEASES.

GENTLEWOMEN: -The social status of women, in every age, has been so closely linked with their diseases, and has played so prominent a part with respect to the origin and prevalence of their special afflictions, that a lecture on the latter, such as I am about to deliver, would seem incomplete without at least some reference to the laws and eustoms that have been woman's bane, as well as the disgrace of humanity, in every period of the world's history. If we begin with traditional Eye, in the Edenic bower, and, with mental eye, sweep the horizon of the "tide of time" as it washes every shore, visits every people, tribe, and tongue, rolling down in billowy fullness to its spring flow in our day, we shall find in the social and legal condition of woman enough matter on which to base not only a few fitting prefatory remarks to this lecture, but even volumes outnumbering those of the renowned Alexandrian library. From Eve onward, for a period of nearly two thousand years, women were subjeeted to inhuman and galling conditions, even among those tribes who continued to believe in a personal God. It was not alone that they were sold into a sort of bondage as serfs, when given in marriage for a price; it was not solely that they were treated as unclean, and consequently inferior, when nature's laws became operative with them, or when no notice was taken of them in the compiling of the genealogical

records of their times, but because their work was not appreciated, their personal identity denied, and their existence and mission regarded as secondary and conditional. All aeross the brow of early human life, and close up in the wake of advancing time, the barbarities and injustices born of inequality because of sex, continued to manifest their sin-crested, hydra-headed hideousness. From the heathen nations of the early ages, justice and deference to women could not be reasonably looked for: but from those believing in the Deity and governed by the Great Jehovah himself, much that was manly, humane and God-willed could be expected. Yet, expected in vain! God selected Sarah, Rebecca, Joehebed, Deborah, Hannah, Huldah, and other famous women of the Old Testament, as the special agents of his moral providence to the people; and yet, so unjustly were women treated in Solomon's day that the great king eried out, "Give her of the fruit of her hands, and let her own work praise her in the gates." Centuries later, though the men continued to lord it over the women, Ann and Mary of Nazareth, Martha and Elizabeth and others of their sex of the New Testament, were raised to the dignity of being companions and co-workers with Christ in the accomplishment of his great mission; and Paul, as if with Christian chivalry aimed to rebuke the questionable customs of his country in this regard, declared that "The woman is the glory of the man." It can not be denied that to religion and eivilization are women indebted for the ehivalry of the middle ages, and for the position which they occupy in our day and country. Religion and eivilization in turn owe much to woman for her support and refining influence. Were it not for woman's moral influence religion would be a failure in

many respects. Woman's social condition is much better than it has been, and there is room for still greater improvements, not only among Christian nations, but especially among the heathers.

In Mosaic times a woman could not morally or legally lodge a complaint against a man to any effect; the husband could dispose of his wife by giving her a bill of divorce; even in the temple her place was among the slaves, in a corner far removed from the Holy of Holies.

Nero, the Roman emperor, killed his mother, and yet his moral guide, Seneca, and the customs of the country, did not even reprove or punish his crime. Cieero sent off two wives, but so loved his daughter that he wept when she died. For this he was soundly rebuked by Roman statesmen and eelebrities.

In Asia it is esteemed disreputable and disgraceful to respect or assist a female; and to carry an umbrella over the head of a woman, according to missionary testimony, is to be subjected to severe legal penalty.

The women of India, particularly Bengal and Hindoostan, are isolated from birth; at three years of age they are married; at from thirteen to fifteen years of age they are claimed by their husbands, again confined, denied companionship or association with their husbands; when the husband dies the wife is expected to burn herself upon the funeral pile which consumes his body. India to-day boasts of eighty thousand widows under six years of age. To show these any attention, or give them assistance, is an offense against their idol. These can never marry again.

The corrupt laws and anti-woman customs of ancient Greece broke the spirit of the women of Athens. Aspasia, the leader of the abandoned and despairing

of her sex, evened up with the eitizens by enslaving and lustfully fascinating the great Pericles, and compelling, by her wiles, the renowned Socrates, the wisest of sages, to pay homage at her shrine.

The Hawaiian and Sandwich Islanders oppress their women by the law of the Tabus. The wife can not eat with or live in the same house with her husband; the daughter can not eat any food that touches her father's plate; her brother is entitled to the delicacies of the table, but the poorest food is too good for the females.

The common law of England boasted of reform when it stipulated that no husband could whip his wife with a stick thicker than his thumb. Under James I. a woman could be hanged for an offense, the punishment for which in the case of a man was very slight. The day was, in England, when wives, with ropes around their necks and led by their husbands, were exposed for sale in the market places.

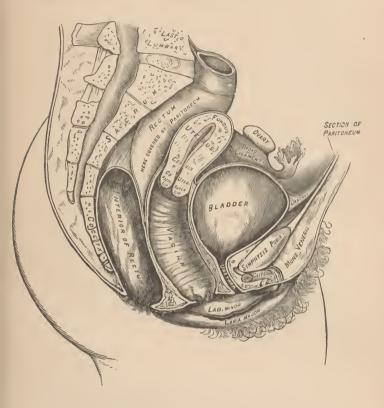
The American Indians and the ubiquitous Gipsey are also crushers of women, obliging them to bear burdens and slave it under all circumstances, while their lords lie around in slothfulness and indulgence.

The coarseness of ancient tribes is, to some extent, observable in their descendants in our age. The wife of the Teuton is a toiler equally with himself; as also is she of the Celt; but poverty has much to do with the prominence and number of such instances. America is woman's haven upon earth, but even here her life is shorn of much of its just joys. She is taxed, but she can not have a voice as to who shall govern. If she sin, repentance can not restore to her what she lost; if she has an escort who is not a Simon-pure she is blamed, and if she go unattended blame is equally

her share. She is accredited the great moral reformer, but her sphere is so circumscribed as to give the denial to the fact. In some states if she have possessions and marry, her husband gets half; if the husband, at marriage, be the possessor and she be minus, she gets only "a trifle." If she be fitting herself for a profession, she is met with the rebuff that she had much better be engaged in raising a family; if she hold a saleswoman's place in a store, she is frowned at because, for sooth, she does not at once give up her place to the tape-measuring fop who parts his hair in the middle. If she is breaking down, physically, from frequent procreations, and solicits her lord and master to desist, that her life and health may be prolonged for the sake of herself and family, she is frowned upon by her husband, and society denounces her for immorality. In matters of affection she may love on without requital; she may be chosen as wife, but seldom is she chooser of her husband. If she love, 'twere a crime to make it known; to seek acquaintance or depart from the beaten path is to be a flirt; hence she suffers, for to have a bad name is to be bad in the eyes of men. Poor woman, when will the day arrive that she can rise or fall according to her merit or demerit, and, if she has fallen, that she may arise again, if worthy, the same as her so-ealled male protector? God grant she may soon have the power to protect herself. These few hints upon the condition of woman tell of excessive physical labor, mental anguish, deprivation of comforts, consciousness of lack of respect, love and confidence all of which constitute the fruitful source of the brood of diseases that curse a woman's life.

Ladies, in this lecture I will strive to teach you the various causes of the diseases peculiar to your sex; how

to avoid them; and when once afflicted, what to do to get well again; or, if this be impossible, to make life endurable at least. Woman's anatomical and physical organization is so constructed that she is liable to



This cut represents the female organs of generation; also, the bladder and rectum in their normal, or healthy and natural positions. (After Gray.)

very many disorders that man in the order of suffering knows nothing about, and consequently can not comprehend or fully sympathize with. The very nature and character of female complaints place women in such a position that they try to conceal their sufferings and struggle on until their nervous system can no longer sustain them. Poor unfortunates! better they had never been born, than to have to struggle on through life with family eares, and too often unsympathetic husbands, who expect them to toil on, even compelling them to arise at four or five o'clock, and get their breakfast, and then work all day long washing, ironing, mending or making; often running sewing machines, with perchance the womb even passing to the world and pressing upon the chair upon which they sit. Think of the man she calls husband demanding continued toil of that dear one he so fondly pressed to his bosom in her youth, and speaking to her the while in such endearing language! Now, that she is his wife, all eare-worn, heart-broken, with her neryous system shattered, digestion ruined, hopes blasted, he comes home abusing, and too often eursing her because the meal is not ready, or finding fault with her cooking; with no kind word of sympathy, smile or kiss, no helping hand, or patting on the cheek; but one continual round of fault-finding till he deposits his careass in bed and is wrapped in slumber. Still his poor wife toils on till ten or twelve, mending his pantaloons, coat or shirt, with aching head, breaking heart and trembling hands. And this is not enough; he must add injury to insult by demanding of her to farther assist in adding to his pleasures, when that very act is making life a curse to her. Poor unfortunate wife! Here the law can not reach her; the unsympathetic lord of his family is "monarch of all he surveys;" his persecution there is "none to dispute," save his poor wife, and she becomes a victim of the passion of her so-called protector. And why? Because she is worked down and unsexed. Thousands die annually from the unrighteous abuse of inhuman husbands. Almost all lecturers and writers on hygiene dwell on the evil practices of lacing and wearing corsets, but when we compare the impositions of husbands upon their wives, lacing and corsets fall into insignificance. How often do physicians hear the lamentations of women regarding the harshness of their husbands, and their oft-repeated and unreasonable demands? And when physicians advise these husbands to give their wives rest and every possible chance to recover, they are very apt to change physicians and deelare such physicians are either fools or old fogies. You who have good husbands, or who are yet single, may think that such cases as I have pictured are confined to the lower or illiterate classes; but I am very sorry to have to say such is not the case. We find such human brutes from the highest to the lowest, No class of society is free from these monsters, and much legal raping is often practiced upon poor, defenseless women, Mothers, look well to whose eare and protection you entrust your daughters for life. Girls, before you marry think seriously of what you are about to do; remember in your own selection you seal your fate for future happiness or misery. Your glowing anticipations may soon be blasted; your dreams of future bliss may soon be changed to a hideous nightmare of disappointment, hardship, siekness and premature death. Ah! how soon many poor wives are negleeted or forsaken when the bloom of youth begins to fade; when the plumpness and ruddiness of health give way to the colorless flabbiness of over-work, neglect and disease. Then the gay husband seeks more cheerful society in the ball-room or at the bar, while the young wife of but a few months or years is at home toiling or trying to read, with no heart to do anything, waiting, aye, longing for her protector(?) to come home—he who has sworn to stand by her through life; and he does, by permitting her to help support him and his children while he enjoys life elsewhere, either in the dizzy waltz, speaking words of flattery to some innocent girl or professional flirt, or in the pool-room playing or drinking beer and wine, while she is saving all she can, and wearing her threadbare clothing, that he and the children may make a better appearance. Ah! my good woman, the more you encourage such men, the more you will curse your own existence, and each day you throw a spadeful of dirt out of your own grave.

All girls should endeavor to post themselves with regard to their physiological and anatomical make-up, and thereby learn how to eare for themselves and retain their health. It is of life importance that all married women should be well up in the knowledge pertaining to the care of themselves physieally and sexually, that they may enjoy to the fullest extent the blessing of health and prevent their husbands from becoming untrue to them. Indeed, I am compelled to say many married women drive their husbands away through a lack of effort to do their duty as wives, and from filthiness and total neglect of all hygienic laws. Men are often deceived in women. When they are girls, they are all smiles, perfection and perfume; but when married, they become sluttish or filthy, and disregard all laws of even common decency and cleanliness, with hair uncombed, faces smutty or begrimed, bodies neglected and the bath tub abhorred and deserted. All that tends to degrade and disgust

is fast developing, and men shun the wives they once loved to embrace. Ladies, I hope you will all learn speedily that every part of the body needs bathing or cleansing, and the vagina more and oftener than any other part of the body; but great care should be observed not to use water too cold or too warm; it should be about 100° Farenheit. Every part of the body needs the assistance of God's purifying element—water; and those that are the most sparing of the bath are the ones that usually suffer the most, socially as well as physically. Some, yes, many of you may sneer at such advice; some may think that love is of a much more devoted and divine nature; that it is above the flesh and the devil; that it is embodied in the soul, and that though the body be recking with filth or putrid disease, true love will cling on forever. Love, let me tell von, follows admiration, and goes hand in hand with our passions. Which do you admire the most, the beautiful, fragrant rose or the unfragrant marigold? the sleek and praneing charger, with head ereet, or the tame and sleepy horse with no life or vitality? the one full of sexual power and vitality, the other dead to all sexual desire or power? Which has precedence with you, the repulsive and brutish, or the manly or womanly, innocent and patiently suffering, modest ones? Ladies, it is part of your very being, and more especially is it so of man, to admire all that is beautiful and properly developed in nature, and pity and loathe or despise all that is defective weak or filthy. Our very intellects, hearts and souls reach out to the beautiful; and what is more refining and inspiring in nature than cleanliness and perfection in all things? Beautiful forms and beautiful seenery please us through the eye; delicate and pleasant odors, fragrant flowers and the refreshing influence of the summer showers gratify us through our sense of smell and reviving influence. All things in nature that are beautiful attract us, while all offensive things repel us; deny it if you can.

The men and women that have no admiration for cleanliness and purity of habits in others; that prefer the begrimed and ragged; that are totally ineapable of distinguishing between the beautiful and the dwarfed or imperfeet, the refined and the vulgar, the cleanly and pure, or the filthy and degraded, are simply ignorant and filthy and are degraded themselves. The woman who is filthy of person and wears dirty undergarments does so at the expense of her health and her husband's admiration and love, unless he is also filthy in his habits. A good bath tub in every home well patronized is of more importance than the elergyman or physician in keeping up a good moral and physical equilibrium. I am well aware, ladies, you have much to endure of men, from the use of tobacco, whisky, and many other filthy habits; but, as you are undoubtedly the reformers and refiners of society, let your habits be the essence of purity; and with patience and proper management you can completely revolutionize the habits of your husbands, and mold your sons to your ideal of purity and manliness. You ean and should exert great influence over your husbands, sons and daughters for virtue, morality and good habits.

Life is too short, and health too precious for any one to neglect any hygenic measure to prolong the former and enhance the value of the latter. I am sure that much good results from regularity of habits and cleanliness; and any woman who neglects to follow out the advice given her herein in relation to the eare of the body, will sooner or later pay the penalty. All

such persons pay the fines which nature imposes, with shattered constitutions, homes unhappy or blasted; husbands lavishing their affections and money upon those who are in better health, and who have studied how to please, and, as a result of their efforts, are more faseinating, more attractive and better society than these neglectful and spiritless wives. Thus you can reason from cause to effect how important it is to keep yourselves well, in order to preserve the love and tender care of your husbands. Many men will be devoted and faithful even though their wives are chronic invalids; but many, ave, very many, will not; they will tire of the women who are physically broken down, and continually fretting and finding fault, or are constantly complaining of languor, pain in the back and on the top of the head. God pity the poor woman who is a sufferer with any form of womb disease; especially if she is so situated as not to be able to take the treatment appropriate to the disease. Millions of poor women are eking out a miserable existence in this world, and going down to premature graves unloved and neglected, who, were they physically stout, would be loved and petted. But alas! the bloom of youth has faded; they are limp, relaxed and lifeless; life to them is a burden, and the long, dreary evenings are spent alone, while their husbands are seeking more cheerful surroundings. So you go "Drifting apart as you float down the stream."

> Drifting apart, as you float down life's stream, Only remembering the past as a dream, Drifting, oh! drifting God only knows where, And looking on life as a fraud or a snare.

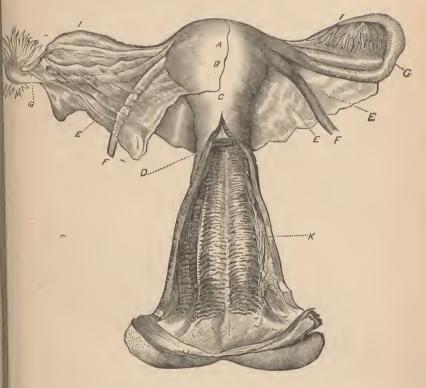
Drifting away in the dark and the gloom, Soon will your frail barque fetch up at the tomb; Drifting away on the breakers of time, Sadly remembering the joys that were thine.

Let me again urge you to make the same efforts to retain your husband's love and affection that you put forth to gain it. But few young men of taste or refinement get smitten with an untidy girl. See that your hair is combed, your clothing neat and clean, and above all do not wear dirty undergarments; bathe often to remove all offensive secretions from all parts of the body, and thereby retain health and beauty, and the admiration of your husbands. The morning, noon and night kiss should never be neglected. Make your homes inviting; if you sing or perform on any instrument, keep these accomplishments up; do not lock up your parlors and make them dark and musty apartments: let the best place in your house and the warmest place in your affections be given to your husband, and see that you do not neglect him for your children or society; keep his love and affections warm by giving him proper attention, and let not those caresses you gave him when you both were lovers be discontinued; and especially see that you do not break yourselves down, physically and sexually, by labor; for if you do, just as you lose health, sexual power and beauty, just in the same ratio you may lose the warmth, ardor and love of your husbands.

Mothers, you should advise your daughters relative to what their conduct should be at the approach of the menstrual flow. Many children are so ignorant of nature's laws as to become terribly frightened, fearing death from homorrhage, and frequently bathe in cold water, producing suppression, often resulting in consumption or death.

You here see a cut of the vagina, showing the *ruga* or folds lapped upon themselves like a fan. These *ruga* need thorough cleansing sufficiently often to keep

the parts free from all secretions, thereby avoiding a tendency to *leucorrhæa*—whites—by keeping the parts in a tonic and healthy state, and ward off the relaxed



THE VAGINA LAID OPEN. (AFTER RAMSBOTHAM.)

Showing the rugx—wrinkles, K; and the womb with its appendages, II; ovaries, G G; Fallopian tubes, E E; broad ligaments or folds of the peritoneum, F F; round ligaments, A; the fundus of the uterus, B; the body, C; the neek; and D, the os—mouth; the dark line near A and B shows the peritoneum cut away on the left side.

condition that is common to many females, which favors falling of the womb. All females who are mar-

ried should endeavor to avoid the relaxed condition of the vagina, for four reasons:

1. In order to properly fulfill the position of wife.

2. To avoid falling of the womb.

3. To avoid cystocele—prolapsus of the bladder.

4. To prevent leucorrhaa—whites.

The vagina is a hollow muscular and membranous canal, and when in a state of tonicity assists in holding the womb in position; but when in a greatly relaxed state fails not only to support the womb, but in reality aids in dragging it down and eausing procidentia—falling of the womb. The vagina in the healthy state is from three to four inches long on its anterior wall, and from five to six inches on its posterior wall, and, lying in rugæ or folds, which admits of great distention—a provision of nature for the passage of the child in labor.

Young girls, do not make haste to marry; do not let your desires for husbands outstrip your judgment. Let me relate to you an incident of my personal knowledge, which is only one of thousands in our land. In a beautiful and flourishing city there lived a young girl, loving and trustful, and respected by all who knew her. She united her fortunes with a man many years her senior. This man had contracted a constitutional disease, which poisoned every drop of his blood and every tissue of his body, and totally unfitted him to become a husband or a father. Such a union is sure to terminate in ill health to the wife and premature decay, and early death to the ehildren. one of the cemeteries of the city referred to can be seen a long row of little graves, eight in number, testifying to this man's depravity and lieentious habits in early life, and also to his wife's physical and mental

suffering, for she, too, is now resting by the side of these pledges of a hasty, unfortunate and ill-assorted union. She now finds relief in the grave, the only unoutraged bed she ever had after entering the married state. For years before her death she was an invalid, resulting from her unfortunately becoming a mother, and thereby tainting her own blood with the constitutional malady from which her husband was a sufferer through his own guilt and folly. Every year she gave birth to a diseased child, each of whom died within a few weeks or months at most. This little row of graves, with the unfortunate mother at one end, tells a sad story to the physician, the pathologist and the student, of nature's outraged laws; and yet, we can find traces of similar unfortunate eircumstances by visiting almost any eemetery in our land. We read in Holy Writ of the sins of the father being transmitted to the children. But, ladies, let me tell you it does not alone taint the children, but it also infects the mother's blood. Think of this, mothers, and you who are about to become mothers, for nature is relentless and will pay her debts and demand the last farthing in return. But few females, especially girls, know that men suffering with secondary syphilis—pox—which they contract through their own licentious habits, or, as it is commonly termed, sowing their wild oats, can and do transmit the poison to their wives, should they become enceinte-pregnantas their systems are poisoned with that greatest of curses known to man. Every drop of blood which flows from the mother to the fœtus, again returns to the mother, to her heart and lungs, and passes on through the great aorta and its branches and ramifications, and so returns again to nourish the fœtus. Thus you can

see at a glance that whatever poison was contained in the spermatozoa—germ—must necessarily be carried throughout her entire system, and poison every tissue of her body. This is now admitted by most pathologists to be a fact. I am aware there are those who will doubt this doctrine, on the grounds of the infinitesimal nature of a spermatozoa—seed of the male—which you



here see illustrated. You are all aware of the small amount of vaccine virus which will produce the characteristic poe upon a person, and often so completely influence the whole system as to aet as a prophylactic—preventive or modifier of that terrible disease, small-Magnified 480 times.

(DALTON.) pox. If such is admitted can we wonder

or doubt the former proposition?

Hereditary syphilis often shows itself in the teeth of the innocent babe, and tells its painful story, as surely as a sign-board on the cross-roads points to a town or village. Mothers often ask the doctor why it is their children have such notched and deformed teeth.





SYPHILITIC TEETH.

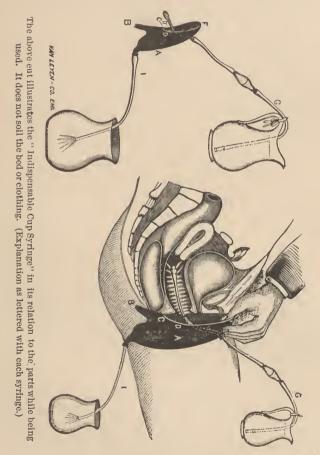
SOUND TEETH.

Ah! mothers, this is one of the signs that you read of in the Bible where it says, "The sins of the father shall be visited upon the children, even to the third and fourth generation."

LEUCORRHŒA (WHITES).

The most prevalent form of female diseases we meet with is leucorrhwa—whites. It is a flow or discharge

of white, glarry, mucous or muco-purulent matter; when very bad, the discharge is often of a greenish color and offensive. This disease comes from various causes,

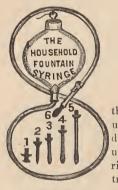


PARKE, DAVIS & Co., Sole Agents for the United States, Detroit, Mich.

such as cold, prolonged menses, tumors, pregnancy, overwork, excessive sexual indulgence, debility, acquired or inherited, eatarrh of the womb or vagina, ulceration of

the womb, and gonorrhæa. Many eases of the whites might be eured before becoming ehronic if the lady afflicted had only bathed the parts and the vaginal tract with lukewarm water several times a day, which can be done with the indispensable cup syringe. It is especially serviceable when the person is confined to bed; indeed, a want of proper care and bathing often brings about female weaknesses.

But few ladies fully realize how potent the free use of tepid water is in keeping them healthy sexually. The treatment is simple and easily administered when the trouble arises from a purely local cause, such as cold, lack of proper cleanliness, or from excessive indulgence sexually. Where excesses have been indulged in, abandon them, and obey nature's laws; bathe in tepid water every three hours; use the "indispensable cup syringe," fountain syringe, or utro-vaginal syringe, to cleanse the vaginal tract clear up to the womb; and use the following wash three times a day:



 R. Zinci sulphatis
 3ii.

 Morphiæ sulphatis
 grs. xx.

 Tincturæ lobeliæ
 f3ii.

 Extracti hydrastis
 f3i.

 Extracti pinus canadensis..f3i.
 Glyccrinæ

 Aquæ destillatæ
 ad 0i.

M. ft. Lotio signæ: Half a teacupful of this medicine to a pint of warm rain water; use three or four times a day with the "Indispensable Cup Syringe," or Chamberlin's utero-vaginal syringe, or the Fountain syringe, either of which is indispensable in the treatment of all cases of female weaknesses.

Manufactured by THE DAVOL M'FG Co., Providence, R. I.

If this solution produces too much smarting or pain, take half the

amount of the medicine to the same amount of water.

If it does not smart at all, or benefit, or give relief, make it stronger by adding more of the solution each time. In addition to thoroughly cleansing the vaginal canal with tepid water several times a day, and using the above medicated wash, (F 6) a tablespoonful every three hours, or the following:

R. Vini ferri amaræ......3viii.

Signæ: Tablespoonful every three hours, or three times a day, to tone up the system, regulating the bowels with liver pills (F 3) or Rochelle salts, taking a tablespoonful every night dissolved in water.



Chamberlin's Utero Vaginal Syringe.

Sole agents for the United States, Parke, Davis & Co.,
Detroit, Michigan.

Married women should cleanse the vagina immediately after coition, with the douche, using tepid water, unless they do not bear children; if so, and they desire children, they should not use the syringe until morning, lest its immediate use should prevent impregnation, which it might possibly do.

ENDO-METRITIS—ACUTE AND CHRONIC UTERINE CATARRH.

The acute form of catarrh of the womb is usually ushered in with the symptoms of a common cold or catarrh of the head; the patient is usually feverish; pain, a dragging sensation and weight in the back and abdomen are experienced; also pains in the groins and thighs, a burning or pricking sensation in

the vagina, and a frequent desire to urinate and stool, with tenemus—griping. After a few days there is a discharge of water and mueus from the vagina, which in about ten days changes to pus—matter—oftener mixed with blood. This discharge is so poisonous as to cause cruptions on the mucous membrane of the vagina and also the skin, and even ulceration. It is often



CERVICAL ENDO-METRITIS.

Catarrh of the neek of the womb, leading to the cavity, shown by the dots.

attended with intolerable itching. Husbands may beeome diseased from these secretions and have well developed uretheretis, and frequently good and innocent wives are accused of infidelity by their husbands. and separation and divorce are not infrequent from such causes. Poor wives, what must they not endure! Husbands, think of the infamy and injustice of such an aecusation against a siek and suffering wife. Indeed, very many physicians will also condemn the poor woman, through their own igno-

ranee or lack of ability to make a correct diagnosis of the disease, causing the woman to become the vietim of suspicion, if not of persecution, through their ignorance. I hope all men who read this lecture will treasure it up, and do justice to their afflicted wives. Oh! husband, young or old, do not outrage your sick wife by beastly demands; do not refuse to employ a physician to eure her, and dare not to add insult to injury already done,

by accusing her of a crime of which she is innocent an accusation which crushes her hopes and pierces her heart as a dagger.

I will here state once for all, that every form of female complaint, whether acute or chronic, where there is any discharge whatsoever, may produce urethretis in the male, resulting in symptoms very or quite similar to gonorrhea. The menstrual flow, or the glairy secretions which frequently follow it for a day or two, may also produce very similar symptoms in the male. I trust what I have said will not offend even the most fastidious, and, I am sure, if read and remembered, will be the means of preventing many unjust suspicions, and of ruining the lives of many innocent women, and the destruction of families. To study nature's laws is to study God's laws. "Honi soit qui mal y pense"-" evil to him who evil thinks." But few men ever sympathize with their wives when broken down sexually; they are too often found layishing their affections elsewhere, and neglecting the wife of their choice, and spending the money on others that should go to pay for the eare, treatment and restoration of the one who has sacrificed her health and beauty on the altar of love. Married women can not afford to destroy that which makes woman most lovable to man; and if they do, my word for it, they will suffer negleet. Keep yourselves healthy, clean and tidy, and meet your husbands with a loving smile and an affectionate kiss, if you want their entire love and affection. Many married women think if they work hard to accumulate wealth they will be the more loved and respected by their husbands. Stop and let us examine the results of such a course. We find an army of women broken down in health, sexually unfitted

for wives; no warmth, loathing the sexual embrace. and submitting to it as martyrs only as a matter of duty, with no physical response, cold and passionless. Their husbands are soon found seeking other society: home is to them as an iceberg; a place where duty calls them, pleasure never. Ever remember that a husband's love and admiration is best retained by simply doing what you are amply able to accomplish, without injury to yourself, and retain health, vigor and cheerfulness. You can hire servants, but you can not hire a husband's love. Be ever ready to make yourself first in his thoughts; the first to cheer him in sorrow, and make his home to him the most lovable spot on the face of the earth. Do not attempt to force him into measures, but eaudle, pet and flatter him, and you ean lead him as you would a child; but drive him, never.

Treatment of acute catarrh of the womb—acute endo metritis-consists of rest, both from mental and physical labor; when severe, the patient should remain in bed and not arise to a sitting posture even to attend to nature's ealls. When in great pain, or neryous, one grain of powdered opium or one-fourth grain of morphine should be given every two, three, or four hours, or an injection of thirty drops of laudanum and a teacupful of warm water containing a tablespoonful of starch given by the rectum—bowel—every three or four hours; in addition, the abdomen should be covered with a poultiee of flax-seed meal mixed with hops, and over that a piece of oiled muslin or silk to retain the heat. Let it remain for twelve hours before removing it. When there is a muco-purulent discharge of matter, then a tea or infusion should be made and used as a wash three times a day, composed as follows:

Lobelia herbtwo o	unces.
Poppy headstwo o	unces.
Flaxseedtwo o	unces.

Pour over the above three quarts of boiling water, stir and let steep one hour, then strain and add two ounces of starch; keep warm, and use one-third as a wash with the vaginal douche, three times a day. Great care should be taken not to injure the patient while introducing the tube, and no astringent washes should be used. The patient should be earefully moved to the edge of the bed, and her feet put on two chairs; an oil-cloth may be formed into a funnel to conduct the water into a tub or other vessel on the floor, or, what is far better, use the indispensable cup syringe. If in a malarial climate, (F. 2) or (F. 12) may be given. If much fever, the bowels must be kept open with Rochelle salts or (F. 3).

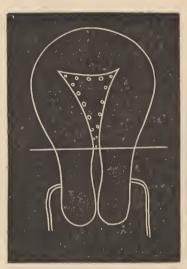
CHRONIC ENDO-METRITIS-UTERINE CATARRH.

This disease is a source of great annoyance to females, and, if neglected, will surely undermine the general health, and break down the strongest constitution.

You here see a plate illustrating the malady. It frequently causes sterility. Females failing to become impregnated should be examined by a thorough and experienced physician, and learn the preventing cause, and be properly treated, if they wish to bear children. This form of difficulty may cause females to abort or misearry. The causes are as follows: Injury, constitutional diseases, vaginitis, catarrh, gonorrhea, excessive venery and suppression of menstruation from cold.

The symptoms may be summed up as follows: Pain in the back, a dragging sensation in the loins, pricking and burning in the vagina, burning pain on the top of the head or back of the neck, and *leucorrhæa* or whites.

Treatment.—The treatment of this malady is very unsatisfactory, and can be properly managed only by a good *gynecological* physician, one who understands the



CORPOREAL ENDO-METRITIS.

Catarrh of the cavity of the womb shown by the dots.

treatment of chronic uterine diseases. All females suffering with this form of trouble should take (F. 6) in tablespoonful doses three to six times a day, or a teaspoonful of bitter wine of iron three to six times a day, and keep the bowels regular with (F. 3), taking one or two every night until they aet properly; or take Rochelle salts. The patient should use the indispensable eup syringe, or Chamberlin's utero-vaginal syringe,

or the fountain syringe at least once a day with lukewarm water; then take a teaspoonful of (F. 13) to one quart of warm water, and use in like manner with the syringe to the vagina; or take sulphate of zine, one teaspoonful to a quart of rainwater, and use from one-half to one teasupful to a quart of warm rainwater, as directed above.

AREOLAR HYPERPLASIA.

This is an enlarged and thickened condition of the body or cervix of the uterus, or both; the dotted portion representing the places or parts of the womb enlarged.

This disease is a disorder of nutrition, and is characterized by congestion-hyprægenesis-excessive enlargement of the connective tissues and hyperesthesia—an exalted condition of its nerves. It may be termed chronic inflammation of the womb, or chronie parenchymatous metritis or hypertrophy—an enlarged condition, attended with chronic inflammation. The eauses predisposing and exciting are as follows:



CERVICAL AREOLAR HYPERPLASIA.

Enlargement of the neck of the womb, as shown by the dots.

Predisposing.

Tendency to tubercle, scrofula, spanæmia, puerperal inflammation of the womb, over-exertion after delivery, prolonged nervous depression.

Exciting Causes.

Parturition or abortion, displacement, heart disease, tumors of the abdomen, pressing on the *vena cava*, excessive sexual intercourse, over-exertion during menstruation.

Symptoms.

Pain in the back and loins; pressure on the bladder or rectum; disordered menstruation; difficulty of locomotion; nervous disorders; pain during sexual intercourse; dyspepsia; headache and languor; leucorrhæa—whites—hæmorrhoids—piles—pain and pressure on



CORPOREAL AREOLAR HYPERPLASIA, Enlargement of the body and fundus of the womb.

the bladder, and pain in passing water, which results from the downward pressure of the womb, due to its increased weight. No female suffering any eonsiderable length of time with such an affliction is free from indigestion, nervous prostration, irritability and a predisposition to despondency; she scolds the children, and even the husband gets his share, which he no doubt often deserves.

Treatment.—Among the first things to be done is to put the patient at rest, but not constantly in bed. It is useless to give medicines with the patient continually at work. This is imperative. Freedom from sexual intercourse, tonies, bathing regularly, keeping the parts clean and free from all secretions, good, nutritious diet, but not too rich, are requisites. The skirts or dresses should not be worn tight about the waist or supported by the hips; skirt supporters should be worn. Mme. Demorest's or Bacheller's skirt supporters

are good, or you can use suspenders made of broad elastic bands, sewed or buttoned to the skirts. Tampons of absorbent cotton, as large as can be introduced into the vagina, and passed earefully up, gently pressing the womb backward and upward, should be used. The patient should lie on her back, and have a careful nurse introduce the tampon, which should first have a stout string, about eight or nine inches long, fastened to it. Saturate the tampon with the following prescription:

Glycerine.....eight ounces.
Tannic acid.....one drachm.
Carbolic acid....one drachm.

This tampon should be introduced twice each day, once in the morning and again at noon, and each time a tampon is removed the utero-vaginal, indispensable cup syringe or fountain syringe should be employed, using one quart of lukewarm rain water each time. The patient should take (F. 6), a tablespoonful three times a day; or fluid extract of ergot, one ounce; compound tincture of cinehonia, three ounces; compound tincture of gentian, one ounce; elixir of bromide of potassium, three ounces. One tablespoonful three times a day, two hours after meals, for two weeks; then guit for one week, and commence again. Or take a tablespoonful of bitter wine of iron after each meal; keep the bowels regular with liver pills (F. 3) or Rochelle salts, and take exercise in the open air every day when the weather will permit. By such a course great benefit may be derived, but local treatment to the cavity of the womb is often necessary, which must be done by a skilled gynecological physician.

AMENORRHŒA

Is an absence of the menstrual flow when not caused by pregnancy. It is of vital importance to know what the cause of this trouble is and endeavor to remove it at once. Nothing is so marked a proof of serious derangement of the system as the absence of the menses, when not due to pregnancy. The patient usually looks pale, anemic—bloodless—often of a greenish-yellow color, is nervous, with shortness of breath, palpitation of the heart, vertigo—swimming of the head—and general lassitude or weakness. Such patients often have a cough and frequently spit blood. This form of trouble should never be neglected, as the patient may die of consumption or low fever.

Treatment consists in wholesome and nutritious diet, with plenty of sleep, bathing and tonics. When due to mechanical obstruction the cause must be removed by a surgical operation; if from debility or incipient or advanced tuberculosis—consumption—tonics are very important. Give of (F.6) as directed, or elixir calisaya, ferri et strychniæ in teaspoonful doses every three or six hours. Regulate the bowels with (F. 3) or Rochelle salts. Give a little good wine or beer and cod liver oil three times a day; take good food, rest, regular sleep, bathe every second day, and take outdoor exercise when the weather will permit. Late parties and balls must never be indulged in. If consumptive, go to Southern Florida, Alabama or New Mexico in winter.

MENORRHAGIA AND METRORRHAGIA.

The first of these terms means a profuse or excessive discharge during the regular menstrual flow; the

second means any flow, whether profuse or slight, between the regular menstural periods. Any lady suffering as above stated, should at once eall in a good physician and have a thorough examination made in order to get the proper treatment.

A few years ago I was ealled to prescribe for a lady suffering with metrorrhagia; she had been treated by a physician for change of life for six weeks. Upon examination I found an adherent placenta—after-birth and removed it. She soon recovered. On another oceasion I was called to see a lady similarly afflicted, who had also been dosed for months for change of life; she was suffering with eaneer. All or many eases may be eured if understood and treated properly, except when eaused by eaneer. Where a retained placenta or ehorian is the eause of hemorrhage, its removal is of eourse necessary; if it is due to uterine polypus, extirpation is the only remedy; if due to eaneer, palliatives, such as opium and quinine should be given internally in grain doses every three hours, and astringent washes of extract of Pinus Canadensis—hemloek bark—a teaspoonful to a teacupful of water; use with the indispensable eupsyringe, the utero-vaginal syringe or fountain syringe every two, three or six hours, as needed. Tonies should be given to tone up the relaxed condition of the womb, such as tineture of einchonia, two ounces; extract of hamamelis, one ounce; extract of ergot, one ounce; mix and give a teaspoonful every three hours, and during the menopansis—interval of menstruation give the above tonic three times a day, or give of (F. 6) a tablespoonful every three or six hours.

CHLOROSIS OR GREEN SICKNESS.

"This is probably a neuroses—disease of the ganglionic system of nerves." It produces as a class of symptoms anæmia—a deficiency of the red corpuscles of the blood—constipation, dyspepsia, palpitation, menstrual derangements, irregularities, and often suppression. Chlorosis is therefore not a disease in itself, but the result of disease. The treatment usually consists of tonics, with remedies to regulate the liver and bowels. Bitter wine of iron should be given in table-spoonful doses three times a day, or (F. 6) or the following tonic:

Ŗ	Vini ferri amaræ	ss.
	Tincturæ nucis vomicæ3iv.	
	Liquoris potassæ arsenitis3ii.	

M. Sig: A dessertspoonful in a wine glass of water immediately after eating, or a teaspoonful of (F. 14) every night, or as needed to regulate the bowels; good nutritious diet, regular sleep, bathing twice a week in water and room sufficiently warm, together with out-door exercise, such as horseback or carriage riding. If the patient is attending school she must discontinue attending school until she recovers.

ULCERATION OF THE WOMB.

We now eall your attention to ulceration of the os—mouth—and cervix—neek—of the uterus—womb. They are divided or classified as follows: The granular, follicular, true inflammatory, corroding, syphilitic and cancerous ulcers.

The granular form is not strictly an ulcer, but granular degeneration, very similar to a granulated eye lid. This form of ulceration is by far the most frequent. It often exists for a great length of time without the person being aware of its presence, but it will,

eventually, manifest itself by a letting down of the nerve force, resulting in lassitude, irritability, loss of appetite and sexual desire. This as well as all other forms of ulceration sooner or later show signs of general infringement upon the female economy; and so insidious is it that it is usually overlooked, even by medical gentlemen, until the patient is almost a total wreek of her former self. Ladies, if you would retain your youth, cheerfulness and hope, do not neglect yourselves; if you would retain that elasticity in walk, that plumpness of form, that solidity of flesh, that bright and hopeful expression of countenance, keep your sexual organs healthy. The treatment for ulceration of the mouth, eanal, or neek and cavity of the womb, necessitates local applications, which can only be done by an experienced physician. As a palliative course, which may cure mild cases of ulceration of the osmouth of the womb-I can recommend the fluid extract of Pinus Canadensis—hemlock bark; put one teaspoonful in a quart of warm rainwater; use three times a day, with the utero-vaginal syringe or indispensable cup syringe; or use tannic acid, one drachm; carbolic acid, one drachm; glycerine, eight ounces; two teaspoonfuls to a pint of warm rainwater; use with the syringe three times a day. Keep the bowels regular with pills (F. 3) or Rochelle salts, and use a tonic, such as compound tineture of einchonia, in teaspoonful doses, every three hours, or (F. 6) as directed, and be temperate sexually.

DYSMENORRHŒA.

This is another difficulty from which females frequently suffer, and it is of great importance to them to

be eured; not alone from the fact of the intense pain they endure at each menstruation, but also in that it prevents conception. Were these the only injurious results arising from the malady it, perhaps, would be coveted by many; but be that correct or not, I can assure you that the very mildest forms of female complaints are destructive to female happiness, and often destroy homes that once were joyous and bright. This trouble is truly not a disease of itself, but the result of certain diseased conditions and mal-positions. different causes and varieties are as follows: Neuralgie, congestive, inflammatory, obstructive and membraneous. It is, therefore, of great importance that you employ a skilled physician, who will first endeavor to make a correct diagnosis as to the predisposing eause, and then treat and remove the trouble. I ean assure you that physicians claiming to cure all forms of female complaints by remedies given internally, without ever resorting to local treatment to the os, and even clear into the eavity of the womb, or by surgical aid (which is often necessary), are practicing a fraud upon the public.

I will now show you plates illustrating the truth-fulness of my assertion. You can see by the form of the os—mouth—and cervix—neek—leading to the eavity of the womb, the utter impossibility of reaching the eavity with medicated fluids without the aid of proper instruments in the hands of an experienced gynecological physician.

After having read my lectures, no female need be imposed upon by ignorant pretenders by paying them large sums of money to no purpose, and finally becoming bed-ridden, or by repeated failures, so disgust their husbands that it causes them to look upon the members

of the medical profession as a class of tricksters or imposters. I am sorry to say it is too often the case that unprincipled men, professing much, and knowing but little, do great injustice to the profession by misrepre-



PLATE 1. (AFTER CUNNINGHAM.)

Retroflection of the womb, bent upon itself and pressing against the rectum, causing constipation and dysmenorrhoa—painful, and frequently a scanty menstrual flow—also resulting in sterility. See lecture.

sentations to the eredulous, thereby causing the profession to fall into disrepute, and all good physicians to be elassed, by the victims of these imposters, as quacks.

As I have already mentioned, the treatment, to be

successfully executed, must be governed by the conditions present or the cause producing the disturbance.

As a palliative course, I would recommend the following: When the time approaches for the menstrual flow, the patient should go to bed and apply warm



PLATE 2. ANTEFLEXION. (AFTER CUNNINGHAM.)

The womb bent upon itself and falling forward, frequently displacing the bladder, eausing Cystocele (falling of the bladder), as seen in the engraving. The symptoms are the same, save that it eauses difficulty of passing water whilst the bowel is not disturbed. Sterility and $dysmenorrh\alpha a$ are also common to this displacement.

bricks to the feet, the back and the abdomen; then take tineture of belladonna, twenty drops; tineture of opium, thirty drops; fluid extract of cypripedium pubescens—lady slipper—one teaspoonful;

fluid extract of caulophyllum thalictroides—blue cohosh—one teaspoonful, put in half a teacupful of warm water; use by injection to the rectum and retain. This can be repeated every three or four hours, and it would be beneficial to make a tea of chamomile flowers or ginger and drink freely of it; also take twenty drops of the fluid extract of blue cohosh every two or three hours; or put one tablespoonful in a teacupful of warm water and use by injection per rectum every three hours. For a more definite description of the malformations attendant upon this disease, see chapter on Flexions.

DISPLACEMENTS.

I now briefly eall your attention to the different displacements of the womb, which create great disturbances in the female economy through mechanical pressure.

The first two plates are flexions of the womb.

- 1. Retroflexion—bending backward upon itself.
- 2. Anteflexion—bending forward upon itself.

These flexions cause sterility and pressure upon the bladder or reetum (as seen by the cuts), resulting in constipation, piles, and a dragging pain in the back; great irritability of the bladder, difficulty in passing water, cystocele—falling of the bladder—as seen in plate No. 2, and cystitis—inflammation of the bladder—dysmenorrhæa—painful menstruation—and leucorrhæa—whites.

- 3. You here see a plate showing the three stages of procidentia—falling of the womb.
- 4. The next form you see demonstrated on the plate we call anteversion. It oecasions mechanical pressure upon the bladder, eausing pain and often difficulty in passing urine.

5. The next form you see is the retroversion, which is also demonstrated on the plate. The fundus or body tilting backward, pressing upon the rectum and resulting in constipation and *tenesmus*—griping—when at stool.



PLATE 3. (AFTER CUNNINGHAM.)

This cut represents the normal position of the womb by the top figure, and following that, the first, second and third positions of *Procidentia*—falling of the womb.

Each and every form of displacement I have shown you, results from the following different causes, viz.:

1st. Any influence that increases the weight of the uterus.

2d. Any eause which diminishes its support.

3d. Any force pushing it out of place.

4th. Any exertion which displaces it by traction.

These displacements are often brought on by neglect during and after confinement, and also by the pernicious habit of giving narcotics—opium or morphine—to relieve



PLATE 4. ANTEVERSION,

Showing the normal position and the different stages of displacement forward. This form of displacement also creates disturbance with the bladder and of passing water, and many other disturbances common to female diseases. (AFTER CUNNINGHAM.)

after-pains, and thereby prevent *sub-involution*—the womb contracting back to its proper and normal size. They also result from defective nutrition and uterine eatarrh. It is a common practice to employ pessaries to correct these displacements. Thousands of females

are annually ruined by this wretched practice of wearing pessaries of every conceivable design and construction, all of which are only palliative, and often not even palliative, but positively injurious. In fact, no female should think of wearing one unless guided by the advice of a physician; even then they should be frequently removed and cleansed. I am wholly opposed to the practice of wearing these pessaries. I removed a glass globe pessary from the vagina of an old lady who had worn it for six years without ever having it removed. I was compelled to bring it away with my obstetrical foreeps. The mouth of the womb was as large as my fist, and looked like a piece of raw beefsteak, which was due to excessive friction on the pessary. Thus you see, in place of curing the difficulty it eventually increases it, and adds fuel to the flame. Better by far use tampons of cotton saturated with glyeerine and tannie acid, which anybody ean be taught to apply and remove as required. The best method is to take as much absorbent cotton—kept by all druggists—as you can pass into the vagina, tie a string to it, and saturate it thoroughly with the following:

R	Acid tannici	.3i.
	Acid carbolici	.ʒi.
	Glycerinæ puræ	zviii.
M.		

Then saturate the eotton and pass up to the womb gently, pressing the womb back to the normal position. This must be done while lying on the back, and as often as twice a day, morning and noon, and removed at night, to admit of thoroughly cleansing the vagina with tepid water.

There are many other forms of disease of the womb, all of which need special treatment according to their several natures; most of them need surgical treatment, such as *polypus* and fibroid tumors, namely, sub-serous,



PLATE 5. RETROVERSION,

A falling backwards and downwards of the fundus—body of the womb, causing constipation by pressing upon the reetum, as shown in this diagram; also pain in the back, and dyspepsia. (After Cunningham.)

interstitial and sub-mueous. We have also ovarian tumors, which are simply cystic degenerations of the ovaries, containing a fluid. They result in enlargement, the same as pregnancy, and can only be cured by removing them; nothing but their removal by surgery can give relief of a permanent nature.

WOMEN.

In eonelusion, I will say, gentlewomen, that I have endeavored to give you an outline of many diseases peculiar to your sex in as plain a manner as I possibly could. There are, however, very many complications of the diseases I have enumerated that would only be calculated to confuse you were I to lecture upon them; and also incurable diseases, which could not possibly benefit you, were you to investigate their various natures and symptoms. I have aimed to give you such hints as will aid you in avoiding female complaints, many of which you certainly can avoid, if you obey the advice I have given; and also suggestions to enable you to detect female complaints when you are sufferers, and to apply to competent physicians to be treated, before it is too late. I hope at least to save you from falling into the hands of located and traveling quacks. I have frequently treated ladies for uterine catarrh-endometritis-who told me they had never received such treatment, adding that those treating them prior to myself never treated the cavity of the womb, and yet the disease was located in the eavity alone. I wish to again remind you of the great importance of eleanliness of the sexual organs, thereby preventing leucorrhæa—whites—and catarrhal inflammation of the vagina and womb, as also ulceration. which frequently results from those diseases and the need of the toning influence of nature's purifying element, water. How strange it is that so many should dread the influence of water, and not fear filthy bodies and perchance dirty clothing and homes reeking with nastiness. It is strange but true that we frequently find persons exceptionally particular and cleanly about their homes and clothing, especially their outer clothing, while their bodies are covered with filth; and I have frequently found women who thought it vulgar and improper to cleanse the vaginal canal. Fie on such ignorance and false modesty! There are even men calling themselves physicians who condemn the practice of frequent ablutions or cleansing of the vagina, and claim that it is injurious and unnatural; as well say it is injurious and unnatural to bathe any part of the body. Let the water be the warmth of the blood, 98% to 100° Fahrenheit, and the vaginal douche can be used at all times without fear of injury; indeed, no woman should think of neglecting to bathe during the time she is menstruating, but never in water colder than the blood. The feet should be well covered, and the body comfortably clad; tight clothes or lacing should be avoided, and the skirts should be supported by straps over the shoulders. I have also given you such hints as will greatly aid you in retaining the love and affection of your husbands, and make home what it should be, a place of happiness; and it would be well for you to remember these hints.

I have endeavored to teach you that it is not only to your interest, but also your duty to keep yourselves well, sexually and physically. No man should be burdened with a wife constantly sick, irritable, fault-finding and sexually unfitted to fill the capacity of a wife, or to procreate and bring forth healthy children, when her condition is due to her own willful neglect and filthiness. Neither should she break herself down sexually and physically through overwork and drudgery. All men, when it is possible, should see to it

that their wives are not compelled to overwork themselves, and that they make no unjust and beastly demands of them. In fine, I trust that husbands may realize and appreciate from my lectures the importance of treating their wives with the greatest care, in order to protect them from any of the many female complaints which break down the nervous system and totally unfit them to fill the office of wives and mothers. But when men marry sickly women they should sympathize with them in their afflictions like honorable men, and endeavor to have them cured.

OVARITIS.

This is an inflammation of one or both ovaries; it usually results from abortion or miscarriage, and is quite rare to non-pregnant women. It is usually associated with other inflammations of the tissues surrounding the womb, such as pelvic peritonitis periuterine cellulitis, disturbance of menstruation and gonorrhea.

The symptoms are, pain in one or both sides of the abdomen, with chills and fever, very sensitive to pressure and the abdomen distended. The disease may pass off without the formation of pus—matter—or there may be pus found, which may be discharged into the bladder, rectum or vagina. When there is positive evidence that pus is present, then it is best to draw it off with an aspirator.

Treatment.—Anodynes, in proper doses, should be given to secure rest (F. 19), and tineture of aconite root; for the fever (F. 25). The bowels should be opened every day and perfect rest enjoined. Blisters are also beneficial, as are also warm fomentations or poultices of flaxseed; turpentine and lard, in equal quantities, and

thoroughly mixed, may be applied over the seat of the pain two or three times a day. Lemonade, or eooling drinks containing raspberry or currant syrup, are useful and agreeable. The nourishment should be light and bland, the body sponged every day if the fever is high; and if pus is formed and heetic fever supervenes, egg-nogg and milk punch are in demand, as also wine and brandy, to sustain the strength. All such cases require close attention at the hands of a good physician and the nurses. Keep the bowels opened with (F. 3) or Rochelle salts, and tone up during the presence of heetic fever with (F. 26). The patient should be kept perfectly quiet, and free from the annoyance of meddlesome neighbors. When there is intermittent fever attending it give (F. 12).

COCCYODYNIA.

This form of disease is quite common, and yet seldom understood or noted by the average practitioner. It is a disease of the terminus of the spine, and may be superinduced by a fall or an injury. Dr. J. C. Nott first described the malady in 1844, as neuralgia of the coceyx. He removed the terminal bones and found one carious—diseased. Persons suffering to any extent, and finding it painful to sit on a hard bottom chair, should consult a good surgeon if they wish to recover.

VESICO-VAGINAL FISTULA.

This is an opening from the bladder to the vagina, resulting in a constant leakage of urine through the vagina. It is usually caused from pressure during labor. The only remedy is a surgical operation.

PRURITUS OF THE VULVA.

This is one of the most annoying or distressing diseases the female is heir to. The intolerable itching often unfits the sufferer to go into society, or even upon the streets. It is a disease of the nerves of the vulva, and one usually of great obstinacy to cure, and often exhausts the skill of the ablest physician.

Dr. T. Gaillard Thomas, Professor of Obstetries and Diseases of Women and Children in the College of Physicians and Surgeons, New York, recommends as a local application (F. 27–28). It is often the result of some form of uterine disease or of the vaginal tract, and will not yield to any treatment unless the exciting cause is removed; the frequent bathing of the parts with an infusion of lobelia, to which has been added a teaspoonful of baking soda to each pint of the infusion. (See F. 29.) The infusion should also be injected into the vagina at least three times a day. Tonics should be given (F. 6), and regularity of habits observed.

HEMATOCELE OF THE PUDENDA.

This is a hemorrhage in the tissue of one of the labia, or tissue surrounding the vagina. It is generally due to an injury, but may result from labor. I have only met with one case, which followed delivery. The lady had been delivered by a midwife and the distension was enormous. In six hours I made an incision and turned out a clot, and ordered the cavity washed twice a day with (F. 29). The patient should remain quiet for a few days and the parts kept clean. Hernia may also take place into the labia, and if the gut become strangulated, death will take place in a few hours if not reduced. In any accident of the kind mentioned apply at once to your physician.

ERUPTIVE DISEASES OF THE VULVA.

Many of the various skin cruptions are liable to attack the vulva, and thereby become very troublesome, from their itching and painful character. The following are the most common, viz: Erythema, crysipelas, acue, lichm, prurigo, and cezema-syphilitica.

Treatment.—Cleanliness is essential. Arsenic and iron (F. 26 and 30) internally, and the following salve (F. 31) applied to the parts. This disease frequently becomes chronic, and requires the aid of a physician of experience.

INFLAMMATION OF THE LABIA.

This difficulty usually results in an abseess. The treatment is simply cleanliness and poulticing, and anodynes to relieve pain. Give one-fourth of a grain of morphine every two or three hours, to relieve pain, and (F. 2) if chills attend the malady. The bowels should be kept open with (F. 3) or Rochelle salts, and quiet enjoined.

INFLAMMATION OF THE VULVA-VAGINAL GLAND.

On either side of the vagina, just beyond its opening, there are two glands, with small canals opening into the vagina. These glands are called the *vulva-vaginal glands*. The duets leading from these glands may become closed during an attack of vaginitis, and their secretions retained and result in their great enlargement, or inflammation may attack them, resulting in absecss.

Treatment.—Frequent bathing, followed with poultices, is very beneficial. Anodynes should be given internally; one-fourth of a grain of morphine every

two or three hours, and one to three drops of the tineture of aconite root every hour till free of fever. The bowels should be kept open with (F. 3) or Rochelle salts, and if the patient has chills, quinine or (F. 2) should be given, and a bath taken every second or third day. The diet should be light and nutritious.

FOLLICULAR VULVITIS.

This disease may be recognized by the slight elevations on the vulva; the muciparous follicles being chiefly affected with intolerable itching, burning and heat in the parts, and an increased secretion of the glands, usually very offensive and irritating. The inflammation frequently extends to the urethra, causing burning and pain upon urinating. The parts often become very painful. All diseases of the vulva may be mistaken for venercal diseases, and often result in separation and divorce of the husband. How often poor women suffer from the ignorance of their husbands, and too often from the mistaken diagnosis of illiterate physicians.

Treatment.—The parts should be bathed frequently with cold water, and the vagina also cleansed with the fountain syringe or the indispensable cup syringe. Warm poultices will also be found beneficial, or a wash or lotion composed of carbolic acid, thirty (30) grains, sugar of lead, twenty (20) grains, morphine, twenty (20) grains, glycerine, two (2) ounces, water, four (4) ounces; apply every three or four hours, after first cleansing with water. Dr. Oldham, one of the first to describe this disease, relied mainly upon (F. 32) as a local application or salve, which should be applied, after cleansing with water, four or five times a day. Alterative treatment should be given when of long stand-

ing (F. 30). The chronic form is very difficult to cure. A removal of the mucons membrane is occasionally necessary to perform a permanent cure. There is another form called the gangrenous vulvitis, which is known by death of the parts, or mortification thereof. It is either due to an obstruction of the circulation, or depressed condition of the system, and demands energetic, local and constitutional treatment; such cases always require the skill of a good physician.

OBSTETRICS.

CHILD-BEARING is a sublime fulfillment of nature's laws, and, though accompanied with much suffering, is yet a subject not alone fruitful of rejoicing but

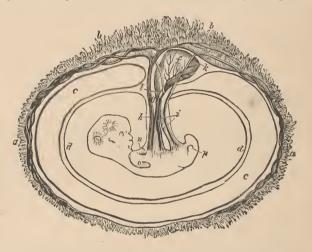
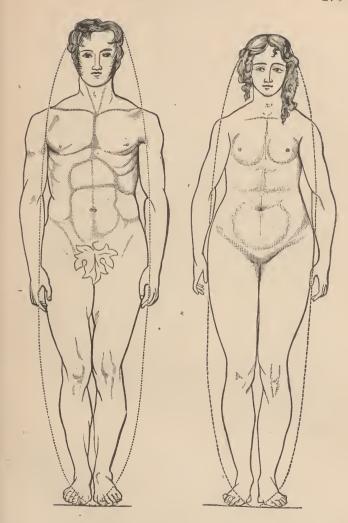


DIAGRAM OF THE FŒTUS AND MEMBRANES ABOUT THE SIXTH WEEK.

a, ehorion; b, the larger absorbent extremities, the site of the placenta; c, allantois; d, amnion; e, uraclus; e, bladder; f, vesicula umbilicalis; g, communicating canal between the vesicula umbilicalis and intestine; h, vena umbilicalis; i, i, arteria umbilicalis; k, arteria omphalo-mesenterica; k, vena omphalo-mesenterica; k, neart; k, rudiment of superior extremity; k, rudiment of lower extremity. (AFTER HARTSHORNE.)

especially of particular demands upon obstetricians. Usually all that is necessary in the commencement of labor is to ascertain the position or presentation; if it is normal it is safe to depend upon nature's own efforts, or at least until it is ascertained that the failing

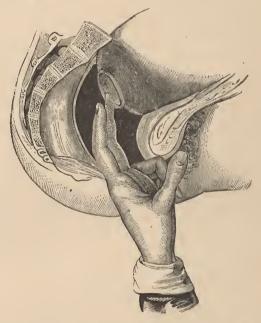


MALE AND FEMALE FORMS.

The dotted lines show the marked difference between the hips of the male and female, by noting where they strike the shoulders of each figure; also showing the natural waist of a female who has not been injured by lacing, (AFTER RAMSBOTHAM.)

strength or lack of pains demand medical or surgical aid.

When mal-positions, such as presentation of an arm, shoulder, knee, foot, breech, or transverse positions occur, then the aid of a well-qualified obstetrical surgeon



Mode of Examining the Womb for Ascertaining the Presentation. (After Ramsbotham)

is required to correct the position and deliver the woman. When the placenta is over the internal uterine canal—placenta pravia—it then becomes a matter of grave moment that delivery be accomplished at once, or death will occur from hemorrhage. No physician or midwife should be permitted to practice midwifery who is not eapable of detecting the different positions of presentations, normal or abnormal.

As I have stated previously, little can be done or, indeed, should be attempted; but when the presentation is abnormal, it should be detected just as soon



VERTEX PRESENTATION.
(Natural Presentation.) (AFTER RAMSBOTHAM.)

as the mouth of the womb is sufficiently dilated to admit of the proper examination, in order that the position may be corrected before the membranes are ruptured and the water—anniotic fluid—has escaped, for

then the operation of turning the child is much more easily accomplished and with less danger to the mother.

Many women perish every year through eriminal ignorance or neglect on the part of physicians and midwives. After the child has been delivered the placenta must be brought away, for if allowed to remain any considerable length of time it will expose the mother to pyamia—blood poisoning. With a judicious effort on the part of the attendant the placenta may be brought away at once by using gentle traction upon the cord and grasping the womb through the walls of the abdomen; by this mode of manipulation it can usually be delivered in a few minutes. Great eare must be observed not to use too much force in pulling on the umbilical cord, as there is danger thereby of inversion of the womb; such accidents have occurred, but any physician or midwife bringing about such a result certainly deserves censure.

When flooding—postpartem hemorrhage—supervenes it requires energetic treatment to cheek it, as a woman may lose her life in a few minutes. I would recommend the use of hot and cold injections into the vagina, alternating every ten minutes, until flooding ceases. Astringent and stimulating teas, composed of witch-hazel, two ounces, capsicum, twenty grains; to these add one pint of boiling water, and inject into the rectum as hot as can be borne, using four to six ounces at each injection and repeating every fifteen minutes or half hour.

In severe cases ice should be carried into the eavity of the womb. I have arrested the hemorrhage in a number of cases that I believe would have perished in a few minutes, had ice not been used. Astringents may be given internally; ammonio-ferric alum may be given in from two to three grains at a dose every half hour or hour. One grain of opium and one-fourth of a grain of sugar of lead, given every one or two hours, is greatly extolled by many. Iee applied over the abdomen I believe to be injurious instead of beneficial, as it generally chills the patient, thereby driving the



FACE PRESENTATION. (AFTER HARTSHORNE.)

blood from the surface to the internal vessels and organs, eausing feeble reactive power and arrest of uterine contractions. I am sure ice applied externally can benefit by shock only, and that influence can be best maintained through the alternating of hot and cold applications. The putting on of the bandage may seem trifling, yet it is of much importance that it be applied correctly. When bandages are pinned too tight above and too loose at the bottom they are positively injurious, producing the same results as tight

lacing, forcing the bowels and the womb down to the bottom of the vagina—procedentia. The pernicious habit of giving opiates to relieve after-pains can not be too greatly condemned. These opiates prevent sub-



POLYPUS PREVENTING DELIVERY. (AFTER RAMSBOTHAM.)

involution—contraction of the womb—which state of enlargement frequently becomes permanent and is then termed hyperplasia, for fuller explanation of which you may refer to my lecture on female diseases.

Following confinement, females may have inflammation of the womb—metritis—and of the peritoneum—

peritonitis—or both combined—metro-peritonitis. This disease is known as child-bed fever. It is a very fatal malady, and should be avoided if possible. The greatest eare should be taken by those practicing obstetrics not to carry disease from one place to another. If a physician or midwife has waited upon a woman who has been stricken with child-bed fever, he or she should cease waiting upon females in confinement for at least one month. The proper removal of the placenta, with due attention to cleaning the linen and bed, are matters of great importance, and even washing out the vagina with one pint of lukewarm water once every day, in which one draehm of earbolie acid has been dissolved, should never be neglected, especially when the discharge is offensive or presents the character of pus-matter. As no one should trifle with human life, I urge it as a sacred duty that all men owe to their wives, that none but those well qualified be employed to wait upon them during and after confinement; for thousands of women die annually through the ignorance and neglect of physicans and midwives. It is a crime that poor women should so often be made the subjects of torture, and frequently ruined for life at the hands of the ignorant. Many females, by such abuse, become invalids for life through the rough manipulation of these ignorant and bungling impostors—quacks. I hope that every man and woman, married or single, will read this lecture carefully, in order to protect lying-in women from the hands of the uneducated and villainous pretenders who have filled the land with groaning women, whose eries reach to the skies and pieree the heart of humanity. Their wonderful discoveries and successes are heralded to the public through the press, pasted upon bulletin-boards or fences like

show-bills, and so commonly recommended to a con-· fiding public by the religious (?) press in long columns setting forth their wonderful cures! And what is still worse, they are certified to or recommended by ministers and deacons of the churches, and imposters are thus aided in money-making at the expense of the women of the land. Our country is teeming with unmitigated seoundrels of this sort, who are daily duping the unwary through boastful pretensions and certificates of cures they never made, backed up by unscrupulous editors of papers conducted by some religious (?) body, filling column after column with matter as baneful and dangerous to their Christian readers as the immoral and vulgar literature is to the growing youth of the present day and generation. Against these depredators Mr. Comstock is battling energetically, and every mother and father in this country should bless him for his labors and his influence. What shall our decision be upon editors and publishers of papers conducted in the interest of religious bodies—bodies of different denominational faiths—when the columns of their papers are teeming with the false statements of quacks or impostors and fraudulent certificates of cures made? Can honorable medical men, especially educated medical men, have any respect or faith in the sincerity of such religious bodies, who, for gold, will permit, ave, welcome into the columns of their papers matter gotten up by men even worse than gamblers? I say worse than the gambler, for he, by his tricks, robs you of your money only, whilst the pretentious quack robs you not alone of your money, but too often of life itself. It is the duty, as well as the privilege, of all honorable medical men to denounce quackery and imposition wherever found, either traveling or located, and espe-

cially to denounce all papers professing to disseminate morality and religious doetrines, that lead the afflicted into the hands of quacks and impostors by giving space to the false statements of such designing rascals. These quacks are like the flowers of the upas tree—antiaris toxicaria—inviting to those unacquainted with them, · but dealing out death to all who partake of their juice. In every city of our land there are men and women practicing obstetries, who should no more be permitted to enter the chamber of a woman in labor than a beast of prev. Husbands, it were far better to entrust your wives to nature's own efforts than to imperil their lives by delivering them into the hands of uneducated and unqualified men and women whom the people too often dignify by the term nature's doctors. Do we find natural chemists, natural mechanics, natural lawvers, natural statesmen, natural musicians, or natural artists, editors or authors? No. All men must study to acquire the knowledge they desire in any department of life. All that man may possess by nature is the mental capacity, which, if cultivated, may elevate him to distinction in whatever direction his talents lie; but if not educated they are like the man we read of in holy writ, who buried the talents entrusted to him, rendering them of no benefit whatsoever. In conclusion, husbands and wives, let me say that I hope I have awakened you to such a sense of duty, in this department especially, that you may not be foolish enough to permit the unqualified to enter your houses, and I trust I have given such advice as will aid you in emergencies. Those wishing to become accouchers must thoroughly qualify themselves if they wish to be practical and do justice to themselves, and more especially to those that employ them in their families.

ABORTION.

This criminal practice, and direct violation of all physiological laws, is becoming a national calamity and deserves special notice. In addition to the murder of the fætus in utero, it produces womb disease—when it does not result in death. At the last meeting of the American Medical Association, in the city of New York, a prize was offered for a comprehensive and short pamphlet to circulate amongst females throughout our land, to enlighten them of the evils and criminal nature of forced abortions.

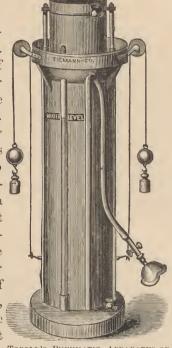
Professor T. Gaillard Thomas says, in reference to his article on abortion: "However much I may desire reformation in this matter, it is not in the spirit of a reformer that all this is written. I am not raising my voice against a great national crime, but am striving merely to establish the truth of my statement, that this crime is so frequent as to constitute in all classes of society—for it is limited to none—a great cause of uterine disease."

THE LUNGS.

Before entering upon a treatise on general diseases, I wish to eall your attention to the normal power and breathing capacity of persons (having sound lungs), according to their height (which I overlooked in my lecture on consumption). A healthy man, whose height is from five feet seven inches to five feet nine inches, breathes on the spirometer three hundred and twenty to three hundred and sixty enbic inches. When it falls much below twenty, and he can not expand the chest by forced inspiration, much over one or two inches there is occasion to fear lung disease, in-

cipient consumption, or a diseased condition of either the liver, heart or stomach. The average healthy woman, whose height is five feet three inches to five feet

five inches, should breathe on the spirometer from two hundred to two hundred and forty eubic inches. Of eourse, the amount of lung capacity increases or diminishes according to the height of the individual. The average lung capacity of a man whose height is five feet six inches is two hundred and ninety-six cubie inches, and that of a woman the same height Swo hundred and fortyfour, making a difference of fifty-two inches in favor of the male sex. Much of this is due not alone to sex. but more especially to the pernicious habit of tight



lacing and the want of TOBOLD'S PNEUMATIC APPARATUS OR Proper physical exercise in the open air, and under the healthful rays of the sun—the great chemist and blood maker. The aged do not apply in these measurements; they can not breathe as much as those in the vigor and prime of life. The corpulent breathe less than the thin in flesh. Enlarged and diseased livers or hearts will also diminish the breathing capacity, even where the lungs are sound, as also a diseased stomach, especially when distended with gas from sourness.

GENERAL DISEASES.

PNEUMONIA-LUNG FEVER.

INFLAMMATION of one or both lungs, or only a part of the lung, is called single, double or lobular pneumonia, according to the amount of lung tissue involved. It is caused from cold and wet, or from injury, idiopathic or traumatic. It usually commences with a chill, followed soon by feyer, delirium and difficulty of breathing, with more or less pain and cough; vomiting is common with children. The patient begins to expectorate—spit up—the third day a matter usually mixed with blood, or rusty in appearance, as if the patient had been chewing some red substance. The height of the fever and severity of the disease is usually reached from the fifth to the seventh day, after which, in favorable cases, the fever begins to decline. When one lobule of the lung, or only one lung is attacked, especially in young children, it is favorable; when both lungs are attacked the patient usually dies, unless naturally very stout. Old people, or those predisposed to consumption, almost invariably perish.

Treatment.—Open the bowels with (F. 3) or calomel, giving from one to ten grains, according to the age of the patient; to be followed in from five to six hours with Rochelle salts or easter oil, if the calomel does not operate. Then use the following for fever:

R	Tincture veratri viridi	3i.
	Tincturæ aconiti radicis	3ss.
	Tincturæ opii deodoratæ	zi.
	Liquouris ammonii acetatis	ξi.
	Syrupus simplex	ži.
	Aquæ destillatæad	žiii.

M. Signæ: Give a child one year old ten drops every one or two hours; to an adult, two teaspoonfuls every one or two hours.

Apply mush poulties to the chest over the diseased lung, or a mustard draft. Five to ten drops of the tineture of lobelia may be given every hour. Make a tea as follows: Crushed white root, one teaspoonful; lady slipper, one teaspoonful; ginger, one-fourth teaspoonful; lobelia, one teaspoonful; put in a teacup and fill with boiling water; keep warm and give a tablespoonful every hour. In low types the treatment must be more stimulating and sustaining, as the following:

R	Quiniæ sulphatis	
	Ammoniæ carbonatis3i.	
	Mucilago acaciæ	
	Syrupi tolutani	

M. Signæ: Two teaspoonfuls every two hours to an adult; to a child one year old, five to ten drops.

Children seldom have this low type, but when hepatization—solidification—is present, it is then very important to give the above medicine, and a tea composed of Virginia snake root, white root and ginger, each one teaspoonful of the crushed roots; capsicum, ten grains; put in a bowl and pour a pint of boiling water over them; steep and keep warm; give the patient a swallow every one or two hours; also, give stimulating nourishment, such as beef tea, egg-nogg, wine whey, milk punch and whisky. Keep the bed and bedding clean and the room ventilated; if in winter, keep the temperature of the room at about 65° or 70° Farenheit, above that it is injurious. Greater eare is necessary in bad weather or in winter. After having had lung fever, flannels should be worn next the skin, and breast-pads (lung protectors).

PLEURITIS-PLEURISY.

This is a disease of the pleura—a sack which surrounds each lung. In this difficulty, we may have simply congestion with recovery, or it may pass, if neglected, from congestion to inflammation. When first attacked, the patient experiences a sensation as if an instrument or knife was thrust in the side, or, as some would term it, a stitch. The patient can not take a deep breath without causing great pain, and often faints. They invariably incline or lie on the side in which the disease is located, and often feel as if they must die at once. There is a slight cough, and if inflammation supervenes the patient will have fever, with an effusion of serum—an accumulation of water—which presses upon the lung and often terminates in an accumulation of pus—matter.

Treatment.—When attacked with this disease take ten drops (F. 48) in water every half hour or hour; tablespoonful of (F. 33) every half hour or hour till easy, and rub over the seat of pain freely with (F. 7) and repeat every three hours, applying hot bricks or bottles of hot water as often as necessary to keep the side warm; heat should be also applied to the feet and hot ginger tea given to drink. When the patient gets relief give a dose of (F. 3) and repeat every four hours till they act, or give ten grains of calomel to an adult, followed in five hours, if it don't act, with easter oil.

To a child one year old, one half to one grain every three hours till it acts. Then give the following:

R	Quiniæ sulphatis	
	Acidi tannici	grs. v.
	Tincturæ veratri viri	gtt. xx.
	Tincturæ opii deodoratæ	ziii.
	Spiritus lavendulæ compositi	
	Syrupus simplexad	Žiii.

M. Signæ. Dose: Two teaspoonfuls every two hours to an adult; to a child one year old three to five drops.

Great care must be taken in giving any remedy containing opium to children, and it should never be done, only by a competent physician, unless in emergencies. Children so young scarcely ever have the disease unless exposed to cold and damp weather. Fly blisters are also good to prevent effusion or abseess.

STOMATITIS—APTHE—INFLAMMATION OF THE MOUTH.

This embraces all the different kinds of sore mouth, both of children and adults, such as thrush, nursing sore mouth, etc.

Treatment.—The best treatment for any of those troubles is to use the following powder: Pulverized borax, hydrastine, of each one drachm; pulverized charcoal, one-half drachm. This mixture should be put in the mouth every three hours, in small quantities, and worked through the mouth with the tongue. Give (F. 1) to correct sour stomach, as directed.

TONSILLITIS.

This disease is what is commonly ealled quinsy. There is soreness in swallowing, with swelling and inflammation of one or both tonsils, accompanied with fever. If it is not arrested at once it frequently swells so that it is difficult to breathe, and swallowing becomes an impossibility.

Treatment.—The treatment is simple. First open the bowels with (F. 3) or a dose of salts. Use a gargle of the following: Tincture of lobelia, one ounce; tincture of eapsicum, one-half ounce; dilute nitro-muriatic acid, four drachms. Put in a glassful of water and gargle frequently. For the pain and fever, give five grains of Dover's powder every three hours, or two drops of the tincture of aconite root and five drops of the deodorized tincture of opium every hour. When the pain is great and the fever high, poultice the neck and apply the liniment (F. 7) freely, or when the liniment can not be procured, use coal oil, but not oftener than once. Leeching is also good. A small piece of ice may be held in the mouth or swallowed often.

PHARYNGITIS.

This disease in the acute stage is a mild form of sore throat, which is very common, resulting from cold, getting wet, or chilled. The treatment consists in giving a tea of slippery elm or flaxseed every two or three hours. Put one drachm of chlorate of potash in a glassful of water; gargle freely every one or two hours, or use from two drachms to one ounce of tineture of kino to a glassful of water and gargle often. Little pieces of ice dissolved in the mouth are frequently beneficial. The chronic form of pharyngitis is more difficult to cure. Make a solution of nitrate of silver of from two to ten grains to the ounce of rainwater and pencil the throat with it; then use the gargle as before directed. A gargle composed of the following is also good: Bayberry, one drachm; capsi-

cum, twenty grains; lobelia seed, one drachm. Make a pint of tea and use as a gargle every three or four hours. Constitutional treatment must also be given, such as eod liver oil three times a day, or compound clixir of corydalis should be taken in teaspoonful doses three times daily; or if there is cough, use (F. 4). If there is much trouble with belching or sour stomach, take of (F. 1) a dessertspoonful every two hours until relieved.

APHONIA.

Loss of voice may be of short duration or permanent, and either functional or structural, nervous or hysterical. Persons may lose the voice through a shock of grief or anger.

Treatment.—Electricity applied to the larynx, or blister the back of the neck. Where the voice has been suddenly lost, it may be relieved by holding a piece of borax in the mouth, weighing from three to four grains. When it is chronic, give a teaspoonful of the clixir calisaya bark, iron and strychnia three times a day, or the following tonic:

Ŗ	Acidi phosphorici diluti3i.
	Acidi nitro-muriatici diluti
	Tincturæ cinchonæ compositæ3vi.
	Tincturæ gentianæ compositæ
	Syrupus tolutaniad. $\bar{3}$ iii.

M. Signæ: A teaspoonful every three hours for adults.

Change of air and sea bathing is also very beneficial. Drop doses of tineture of sanguinaria—blood root—diluted with water, may be taken every one or two hours. Inhalations, by the use of the atomizer, are also very beneficial. The following may be used with the atomizer once a day, for acute pharyngitis:

For ehronie Aphonia:

\mathbf{R}	Tincturæ sanguinariæ3i.	
	Tincturæ opii deodoratæ	
	Glycerina puræ	
	Aquæ destillatæ	v.

M. Signæ: Use once or twice a day, inhaling one teaspoonful each time.

BRONCHITIS.

Inflammation of the mucous membranes of the bronchial tubes is the result of a cold. It may be acute or chronic. In the acute stage, it commences with a tightness and soreness of the chest, fever and cough, and often a feeling as if you had inhaled sulphur. Later the cough becomes looser and deeper, and the patient begins to expectorate—spit up—a frothy or yellowish matter, or, at times, greenish yellow. This disease is dangerous in old persons and young children, but seldom fatal in middle age.

Treatment.—It may frequently be arrested at its commencement, by taking a warm foot bath, and taking internally four to six grains of quinine, together with six to ten grains of Dover's powder, followed with a glass of hot lemonade, containing a tablespoonful or two of whisky, and then go to bed, with a warm brick to the feet. Should this be neglected, or fail, take a dose of (F. 3) every six hours till they act freely, or Rochelle salts. Use (F. 4) for the cough and pain; bathe the chest with liniment (F. 7) every six or twelve hours, and if there is fever, take ten to twenty drops of the tineture of lobelia, or two drops of the tineture of aconite root every hour, and should the patient have chills with it, then give (F. 2 or 12).

ASTHMA-PHTHISIC.

This disease comes on in paroxysms, perhaps every twenty-four hours, every week, month, or every fall—hay fever. It is often very distressing, the patient feeling a sense of suffocation; breath short, or almost gone, face often pale or *livid*—blue,—looks anxious or distressed, wheezes when breathing, and the face and body bathed in a cold perspiration. The attack may last only for a few minutes, or for hours or days.

Treatment.—The treatment consists, for immediate relief, in breaking one of Parke, Davis & Co.'s pearls of nitrate of amyl in a handkerchief, or dropping five (5) drops of the drug on a handkerchief, inhaling the same as chloroform till relief is obtained, which is usually rapid; the pearls are much the safest. If the fluid is dropped on the handkerchief, great care is necessary to cork the bottle, as it is a powerful poison. Then follow with the following:

R Quiniæ sulphas.....ten grains.

Sugar of milk....twenty grains.

Oil of lobelia...ten drops.

Triturate in a mortar thoroughly, and then divide into ten equal parts, and give one every hour, or if in great distress, every half hour till the patient is relieved, then every three hours. Asthmatic persons should endeavor to keep the feet warm and dry, bowels open, and keep regular hours in eating, sleeping and bathing; also observe very carefully what kind of food agrees with them. I have frequently found a change of climate very beneficial, and those who suffer annually every fall with hay asthma or fever, may escape entirely by going to the seashore before the attack usually comes on, and remaining away from four to six weeks.

ANTI-EMETIC REMEDIES.

As vomiting is a common occurrence in many diseases, and as it is very distressing and exhousting, I will give a number of remedies which may be used; many times one remedy will fail when some other one will give the desired relief: A mustard plaster placed over the stomach, or the nape of the neek, or what is still better, along the entire spine, is very beneficial. A spice poultice, composed of cinnamon, cloves and allspice—equal parts—moistened with warm whisky, and applied over the stomach, between cloths, and kept moist by pouring one or two tablespoonfuls of whisky over the poultice every half hour, allowing it to filter through the skin, is an admirable application in cholera morbus or cholera infantum. The poultice should be applied hot, and kept warm with the addition of warm whisky as warm as the skin will bear it. The poultice should be fastened on with a bandage around the waist, or it will be constantly falling off during the retching of the patient. Small particles of ice held in the mouth, and even swallowed, are frequently found to be one of the very best remedies. Lime water given in from five to twenty-drop doses, every ten to fifteen minutes, is also an excellent remedy, and all of the following are frequently beneficial: Mineral water, champagne, brandy, aromatic spirits of ammonia, compound tineture cardamom, compound spirits lavender, cinnamon water, spirits chloroform, sub-nitrate of bismuth, oxalate of cerium, creasote, carbolic acid, infusion of cloves, and calomel in small doses. Very stimulating injections are also very effective where the vomiting is due to congestion of the stomach or bowels, or even the brain. Use the following as an injection:

M. Signæ: One or two teaspoonfuls every one or two hours in a teacupful of warm water, and given by injection. This should be repeated every hour till easy, and at the same time wring a cloth out of hot water, and apply over the stomach as hot as the patient can bear it. This should be repeated every few minutes, till relieved. In congestive attacks, ten grains of quinine should be given with the above compound, every three hours, till thirty or forty grains are used. Great caution should be observed not to allow the patient to drink too much; in fact, it would be much better not to give any fluids whatever other than the remedies. Many persons perish from being permitted to drink freely of icewater or teas. See doses of the above remedies in the back of the book.

ULCER OF THE STOMACH.

Persons of a strumous or serofulous diathesis and with feeble eonstitutions, are the ones usually afflicted with this serious disease. It may be known by the following symptoms: pain in the stomach, extending to the back, with more or less siek stomach; pain upon pressure over the stomach, and an increase of soreness or pain when walking or if jarred. The pain increases after eating, especially if hot food is partaken of; sugar or vinegar will also increase the pain. When blood is vomited, it is a strong indication of uleer; indeed, you can not with any eertainty, decide it as a ease of uleer without such proof; even then it may be due to eaneer. Chronie inflammation, aortic aneurism—a morbid dilatation of the great artery—or spinal disease, will also present the same class of symptoms, but there will be no vomiting of blood. Caneer, however, may be deteeted by a tumor being present, and spinal disease by the approaching deformity.

Treatment consists of remedies calculated to promote cicatrization; amongst the very best are nitrate

of silver and opium; take five grains of nitrate of silver, three grains of opium and two grains of nitrate of sangninaria; mix well and make twenty pills; take one three times a day, three hours after meals; or the oxide of silver in one or two-grain doses every six hours; or subnitrate of bismuth in three or four-grain doses three times daily, and hydrastine may also be given with advantage in two-grain doses every three Medicines, however, are often more injurious than beneficial, by causing more nausea and vomiting, and thus favoring greater hemorrhage to the greater danger of the patient. I would much prefer giving from ten to twenty drops of liquor ergotæ purificatus (of Parke, Davis & Co. make,) by hypodermic injection every two or three hours, or five grains of ergotine every one to three hours and apply cold cloths or ice over the stomach and give at the same time very stimulating and astringent injections in the rectum, composed of extract of witch-hazel one ounce, extract of ergot two drachms, tineture of eapsieum one-half ounce, onehalf to be put in a teacupful of warm water, injected with the fountain syringe and repeat every hour until all hemorrhage ceases. The less put in the stomach the better, unless it be simply ice, swallowed in small pieces. If the patient is suffering much from pain or vomiting, a hypodermic injection of one-sixth or onefourth of a grain of morphia will also give relief. Any course by which you can influence the system and not burden the stomach, is always the best to pursue. Should the feet be cold, place hot bottles to them and also along the spine, or even mustard plasters are very beneficial. Persons suffering with ulcer of the stomach, should be very eareful about their diet; soups, puddings, milk, eggs, oat-meal, porridge, all bland

and easily digested food, should be used. Solid food must be discarded.

GASTRITIS.

This is an inflammation of the stomach; it may be either acute or chronic. Genuine inflammation of the stomach usually results from corresive poisons or from injuries. The common form, which we usually see, is the result of a cold, and is technically called gastro-hepatic catarrh. It involves the stomach, duodenum and liver, and is more commonly known as bilious attack. This is a common disease in the middle States, more especially in malarial districts. In the acute form there is great distress and vomiting of food and fluids, tenderness on pressure over the stomach, with more or less fever; and usually a slow, irregular, eompressible pulse, but if the pulse is rapid it is usually feeble. Acute gastritis, where it is the result of an injury or poison, soon kills if not relieved. In the catarrhal form the patient vomits up a greenish yellow fluid, has excessive headache, and usually constipation of the bowels.

Treatment should consist, if due to a poison, in washing out the stomach with a stomach-pump, and getting rid of any poison that may be present. Then give the patient one-sixth to one-fourth of a grain of morphine by injection with an hypodermic syringe, by dissolving one of Wyeth's tablets in from ten to twenty drops of water, and inject, free from air, under the skin in the thick part of the left arm three or four inches above the elbow, being careful not to inject into a vein. Put one-third of a grain of ipeeac into a glassful of cold water; give a teaspoonful every ten minutes to stop vomiting, or small pieces of ice may be swallowed every few min-

utes, but give the patient nothing to drink until vomiting ceases. A spice poultiee over the stomach is also good, composed of equal parts of pulverized cinnamon, cloves and allspice, made wet with warm whisky, put between cloths and placed over the stomach, then moisten every half hour by pouring a tablespoonful of warm whisky over the poultiee. As soon as the vomiting ceases, give a cathartic of Rochelle salts or (F. 3), as directed.

LARYNGITIS.

A slight congestion or inflammation of the mucous membrane of the larynx is very common, the result of cold; its signs being a dry, harsh, hoarse cough and soreness in breathing. It is also attended with fever and frequently a feeling of suffocation and difficulty of swallowing. There is danger of a dropsical effusion taking place under the mucous membrane of the larynx, resulting in suffocation and death, if relief is not obtained. We frequently find chronic laryngtis in consumptives.

Treatment.—The treatment consists in bringing remedies in contact with the mucous membrane, through the use of the atomizer, by spraying (vaporizing) the larynx. Put one ounce of hops, one drachm of fluid extract hyoscyamus, and one drachm of tineture of opium in one pint of boiling water, and inhale the vapor several times daily, or take benzoate of soda, twenty grains; add to one ounce of water and inhale with the atomizer once or twice a day, using from one-third to one-half ounce at each inhalation, or take five grains of morphine, and carbolic acid ten grains, to two ounces of water, use one-third by inhalation, as directed. If the patient can take cod liver oil, then it should be

taken in tablespoonful doses three times a day in whisky, or the clixir of calisaya bark and iron may be taken in teaspoonful doses three or four times a day. If the cough is troublesome, take (F. 4) and keep the bowels regular with (F. 3). If there is soreness of the stomach or heartburn, use (F. 1), bathe regularly once a week, avoid exposure, and cat wholesome diet.

CROUP.

This disease is detected by a hoarse cough, and often attended with labored breathing. There are three kinds of croup, spasmodic, membranous and diphtheritic. The spasmodic is due to deranged nervous action; the membranous to an inflammation of the larynx and trachea; the diptheritic is formed in the mucous membrane of the fauces and trachea. The second and third mentioned are both very dangerous, and require prompt treatment, and when possible, the employment of a physician, as both forms of the disease are fatal in their character. There is great danger in delay, as the difference in the treatment of inflammatory and diphtheritic eroup is very great; the one being attended with a sthenic—high grade of fever; the other asthenic—low grade of fever.

Treatment.—The treatment must necessarily vary much, and it would not be safe for any one to attempt to make the distinction, unless it is a well posted physician. I shall, therefore, say but little about the treatment, trusting that all who read this may not attempt to do what requires the closest attention of an experienced physician to do. In inflammatory eroup, and also the spasmodic form of the disease, it is necessary to give agents to relax and increase the secretions, and the following will be found beneficial:

R	Tineturæ	lobeliæ	zss.
		sanguinariæ	
	Tineturæ	ipecaeuanhæ	$\cdot \bar{3}$ ss.
	Syrupus s	simplexad.	Zii.

M. Signæ: Give a teaspoonful every fifteen minutes till the patient vomits freely, then every hour till the patient is relieved.

For the diphtheritie kind, only until you can get a physician, give the following:

R	Quiniæ sulphatis	grs	xii.
	Aeidi laetiei	3ss.	
	Tineturæ sanguinariæ	діі.	
	Syrupus zingiberisad	Zii.	

M. Signæ: A teaspoonful every one or two hours, for a child two years old; for one year old, from fifteen to thirty drops; for a child six months old, five to ten drops.

In spasmodic croup, a very good remedy in emergency, is common powdered alum. Give a half teaspoonful in molasses every ten or fifteen minutes till the patient vomits freely, or an infusion of lobelia. Many frequently resort to a plaster of Scotch snuff over the breast and stomach. This I consider a practice attended with danger, and in the membranous or diphtheritic form, positively injurious. I hope that all who may read this treatise on croup, will be on their guard, and employ a physician in time, and not depend on their own judgment till it is too late. In the low forms of either diphtheritic or membranous, alcoholic stimulants are needed from the commencement, and beef tea every one or two hours to sustain the strength. Inhalations from the steam of a kettle or of slacking lime is also good.

PLEURODYNIA.

Neuralgia of the nerves, between the ribs, is known by having a dull pain without fever. The pain may be in one or both sides, usually on the left. It is usually increased by deep breathing, coughing or moving the arms.

Treatment.—The treatment is simple: Give the patient a cathartie of (F. 3) or Roehelle salts, giving an adult a tablespoonful every three hours till they act, then follow with twenty grains of quinine, made into ten eapsules or powders, taking one every two hours. Apply the liniment (F. 7) to the seat of pain three times a day.

INTERCOSTAL NEURALGIA.

Severe pains between the ribs, usually between the sixth and tenth ribs, and very frequently of an intermitting character.

Treatment.—The treatment in a malarial district usually requires antiperiodies, as quinine and opium, opening the bowels with Rochelle salts in tablespoonful doses every three hours, or (F. 3), and the following quinine mixture:

R Quiniæ sulphatis	
Acidi tannici	grs.v.
Tincturæ opii deodoratæ	U
Tincturæ gelseminum	0
Syrupi tolutani	~

M. Signæ: A dessertspoonful every two hours.

ENTERITIS, OR INFLAMMATION OF THE BOWELS.

The Symptoms of this disease are pain, increased by pressure, walking and riding, fever and constipation, and as the disease progresses, swelling of the abdomen, vomiting and diarrhea, which latter often assumes a bloody and even a *purulent*—mattery—character. The causes are varied, such as exposure, injury,

constipation, corrosive poison, strangulated hernia and obstruction of the bowels.

Typhlitis is an inflammation of the cœcum, or large gut, at the point where the small gut ends in the ascending colon; at that point we have what is called the ilio-cœcal valve—a valve-like opening between the ilium and the colon. Peri-typhlitis is perhaps the same difficulty, but in a more severe form, and possibly involves a portion of the peritoneum immediately over that part.

Treatment.—Such cases should be kept easy with opiates, given in grain doses every two or three hours; tincture of aconite root may be given in doses of one, two or three drops every hour for the fever, and warm poultices of flaxseed meal or mush should be applied over the abdomen and covered with oiled muslin to retain heat and moisture. I would recommend the application of equal parts of turpentine and lard before applying the poultice, which should not be heavy enough to cause pain, and ought to be changed only twice or three times every day. Where the pain is great, or nausea or vomiting present, give a teaspoonful of (F 1), using one-fourth of a grain of ipecae in a glassful of water, and given in teaspoonful doses, to arrest vomiting. Cold drinks of slippery elm-bark water, or gum arabic dissolved in cold water and given often in small quantities, is also valuable. Acid fruits should be avoided, and light diet enjoined, such as arrowroot, sago, Irish moss, corn starch, oat meal and beef tea, either of which should be prepared as directed in our formulas of dietary for the siek. When there is constipation, which may occur more especially in typhlitis or peri-typhlitis, the bowels should be opened by

enemata—injections, or castor oil. The enemata is preferable; if it fails, oil may then be given.

PERITONITIS.

Inflammation of the *peritoneum* is a very dangerous disease; indeed, it is one of the most fatal we have to encounter. The peritoneum is a serous membrane that covers the bowels. The various forms of this disease are idiopathic, traumatic, tubercular and pnerperal. The first or simple form may arise from cold, due to exposure; the second results from injury, or from a penetrating ulcer of the stomach or bowels, permitting the contents to pass into the abdominal cavity, or abscess of the liver, resulting in a discharge of matter into the cavity; the third is due to tubercles, with softening and inflammation, the same as in consumption; and the fourth form is *puerperal*—child-bed—fever, following neglect or want of proper attention after confinement, or from unavoidable causes.

The symptoms are, pain throughout the entire abdomen, with more or less swelling or puffing up of the bowels, usually very marked after the first few days; pain very much increased by pressure or movements—even the weight of the bed-clothing frequently distresses the patient; breathing is usually difficult, due to distended bowels pressing against the lungs and heart; constipation; tympanites—drum sound on percussion—with fever, and a rapid but weak pulse, easily compressed after the first three or four days. If the case be a severe one, the patient becomes delirious, restless and unable to sleep, and sudden death by collapse may be the result.

Treatment.—In this disease energetic bleeding can be resorted to with great advantage in some cases, but

other eases will not bear it, such as the anamicbloodless—in the pnerperal form, bleeding is not appropriate; on the contrary, it may prove injurious. Opium should be given in one or two-grain doses every two or three hours, and tineture of aconite root, from one to three drops, every one or two hours; tineture of veratrum viridi may also be given in from one to five-drop doses every hour. It may eause siek stomach and vomiting. When such is the ease reduce the dose or give it farther apart. Apply over the abdomen a flaxseed meal poultice, covered with powdered lobelia seed and made moist with alcohol or whisky. They should be made light and covered with oiled muslin, to retain moisture and heat. I would advise anointing the abdomen thoroughly every three or six hours, with the following ointment: Chloral hydrate and pulverized eamphor, each one drachm; extract of opium and belladonna, each twenty grains; cosmoline, three ounces. Spirits of turpentine and lard, in equal parts, rubbed well together, may be applied as before directed. Calomel, in one-half to one-grain doses, may be given, with one-grain doses of opium, to prevent an effusion of lymph. When the stage of debility supervenes, the calomel should be omitted and quinine substituted, in one-grain doses. If the bowels need opening use an enemata—injection—of warm rainwater and soap; but it should be thrown into the bowels gently. Use from one to two pints at a time every hour till they aet. The addition of five or six ounces of milk of assafeetida is an excellent remedy to expel gas from the bowels, and is frequently very soothing. Light and bland nourishment should alone be given, such as arrow root, sago and beef tea; and to sustain the strength

good whisky or wine, egg-nogg, milk punch or wine whey.

COLIC.

Flatulent, spasmodie, bilious and lead eolie, all yield to anodynes; but other remedies should be resorted to to aid in a cure. In flatulent colic give (F. 1) a teaspoonful every fifteen minutes to every hour, according to the severity of the case, until relieved. Cloths wrung from hot water as hot as can be borne and applied every few minutes, is also of great aid. Give ten drops of deodorized tineture of opium every half hour or hour till relief is obtained. For bilious colic give ten drops of spirits of chloroform and ten drops of the fluid extract of wild vam every fifteen minutes or half hour till easy; strangulated hernia produces colie and vomiting, and it is always well to see if the gut is not strangulated before losing time on remedies. (F. 1) ean be given in all forms of eolie till relief is obtained, or the following are all common remedies; brandy, assafætida, ether, chloroform, peppermint, bicarbonate of soda, aromatic spirits of ammonia, anise, fennel, and paregoric and opium. See table of doses in the back of the book.

CHOLERA MORBUS.

This disease is so common as to be understood by almost everybody. The patient is usually attacked in the night with pains in the stomach and bowels, with cramping or tonic spasm, excessive vomiting, and the head and face bathed in cold perspiration. It is a very distressing disease, and friends fear death, but the patient is usually too sick to think of death. In addition to the retching or vomiting, there is a purg-

ing as well, and in severe cases the stool is passed in bed, the patient being unable to get up.

Treatment.—Give a teaspoonful of (F. 1) every fifteen minutes or half hour, and put one-third of a grain of inecac in a tumblerful of cold water; give a teaspoonful every ten minutes for siek stomach; apply a spice poultiee over the stomach (F. 49), and keep it wet by pouring a tablespoonful of warm whisky over it every fifteen minutes or half hour; or apply a mustard plaster, or give ten drops of deodorized tincture of opium every half hour or hour till relieved; or one-sixth of a grain of morphine may be given by hypodermic injection. Apply bottles of hot water to the feet and along the spine, and hot eloths, as hot as can be borne, to the stomach and bowels, changing them often; or give an injection composed of one-half ounce of Hoffman's anodyne, twenty drops of tineture of opium, brandy one ounce, quinine ten grains, and one-half teacupful of warm milk for one dose; inject every hour and retain.

CHOLERA INFANTUM.

This disease is commonly called summer complaint. It is the disease to be most dreaded during the hot months, and especially is it so in large cities and towns where the air is loaded with poisonous gases from vaults, sewers, and from decomposing animal and vegetable matter; also in large tenement houses, where the people live in filth and degradation. When the heat runs above 90° in the shade it becomes one of the most fatal of diseases to teething children; the excessive vomiting and purging frequently destroys them in a few hours; yet it often assumes a sub-acute or chronic form, and may last for days and even weeks. The predisposing causes may be summed up as follows: Heat

ranging up to 90° or above in the shade, impure air, improper ventilation, neglect in bathing every day, eramming or overloading the stomach, and the pernicious habit of feeding children cow's milk (swill milk), obtained from dairymen, too often of diseased cows, suffering from fever, diseased udders, or even those suffering from tuberculosis—consumption. When the milk itself happens to be pure and good, the bottle and tubing is frequently allowed to become filthy, or sourness, fermentation and decomposition poison them, and the yeast or ferment of decay and death is mixed with the milk by pouring it into such filthy and poisonous vessels. Have two or three bottles and tubing, and keep those not in use immersed in a gallon of water containing a tablespoonful of soda. See that the children are not overfed or underfed, and that the milk is from a young, healthy cow, and be especially particular that the cow is fresh. Keep the milk in stone vessels, which should be scalded and eleansed thoroughly with boiling water every day and allowed to stand in the sun for one or two hours: to each pint of pure fresh milk add one tablespoonful of lime-water and mix thoroughly, and place in a pure refrigerator or a good clean cellar, either of which must be free from mustiness, mildew, decaying vegetables or fruits and rancid lard or butter. The child should be fed every one to four hours, according to age; a young babe every hour. Many young babes should not have more than one onnce at each feeding or nursing, or about four tablespoonfuls; others may require more, increasing the quantity and intervals as they grow older. The milk should be diluted about one-half for young babes, and sweetened a little; but the milk should never be boiled, as it alters or

changes the casein—cheesy part—and makes it harder to digest; it should be warmed to a temperature of the blood—99°-100° F. When wet nurses are employed, these should be young and healthy, and one whose child is about the age of your own, and the nurse free from any blood taint, such as syphilis, consumption, scrofula, cancer, or any bad family history, and, above all, moral and motherly. Let me just here warn you again against the pernicious custom of employing wet nurses, for it is impossible to be certain of the purity of any wet nurse or of her family being free from taint. Mothers, do you wish to plant the seeds of decay and death in your sons or daughters, or have them drink in the very nature and traits of their wet nurses? If not, avoid such practices. When you have sufficient milk for your child, nurse it yourself, unless your health will not permit it. If your child throws up the milk, it is oftener due to overfeeding or to dancing or churning it in the air or on the knee than to impurity of the milk. When it is in the habit of throwing or belching up the milk, give it less at each nursing, but oftener, and see that it is kept quiet; rocking a child will often produce nausea and vomiting.

Treatment.—The treatment must be energetic. I have found the following remedies to be efficacious: Camphorated tineture of opium one-half ounce, spirits of chloroform one-half drachm, spearmint water one ounce. Mix and give from five to twenty drops every ten to fifteen minutes till easy, or (F. 41.) Hot cloths wrung from hot water and applied over the stomach every ten or fifteen minutes, or a spice poultice (F. 49.) This should be applied over the stomach, then pour a tablespoonful of warm whisky over the poultice every half

hour or hour, or give (F. 1). Fluids should be given in not greater than teaspoonful doses every fifteen minutes, as it favors vomiting to give them freely. Ice planed off like snow is also very beneficial to allay thirst and cheek vomiting.

DIARRHŒA.

This disease is usually a secondary trouble, the result of either a cold, a congestion or inflammation of the bowels, and it is frequently due to certain laxative or irritating foods that have been eaten, or indigestion resulting in fermentation or sour stomach, or eaterrh of the stomach or entire alimentary canal. Some of the various conditions just enumerated frequently produce diarrhæa, or a looseness of the bowels, which often requires checking or controlling.

Treatment.—Give a teaspoonful of easter oil to children; two drops of turpentine and five drops of paregoric every six hours for three doses, or a teaspoonful of (F. 1) more or less as to the age, or a dose of Roehelle salts. Inflammatory diarrhæa needs opium and aconite, not astringents, whilst atonic diarrhæa needs astringents and tonics. (F. 52), may also be given.

DIABETES-INSIPIDUS AND MELLITUS.

This disease is known by an excessive diseharge of urine every day, attended with thirst; the first named is free from sugar, the mellitus contains sugar. The exciting cause of both may be enumerated as far as understood to be exposure, intemperance, violent emotions or passions, blows on the head and diseases of the brain. In the advanced stages of both diseases the skin becomes dry and harsh, emaciation, derangement of the liver and lungs. The eyes very frequently suf-

fer, and the disease may develop tuberculosis—consumption.

Treatment.—But little can be hoped for from treatment; opium is perhaps the very best in the whole list of remedies commonly used. Tineture of perchloride of iron may also be given in doses of ten drops three times a day diluted in water, and in malarial districts quinine will be found beneficial, in doses from one to five grains twice or three times a day. It is useless to mention a list of remedies, for, as a rule, they are not curative, yet some recover. Recent attacks will yield to opium quicker than any other remedy.

HEMORRHOIDES-PILES.

This difficulty is simply an enlarged, relaxed and thickened condition of the veins and of the mucous membrane of the rectum; the veins frequently rupture and bleed profusely. Through pressure and inflammation large and hardened lumps or tumors are formed and are very painful. There is usually pain in the back and in the rectum, with more or less disturbance of the stomach. Many suffer almost the pangs of death at stool, which is due to their excessive tenderness. Constipation or a lax condition of the bowels favors these tumors by injuring the hemorrhoidal veins.

Treatment.—The bowels should be kept very regular. The habit of using eatharties is injurious, and especially so if aloes is one of the agents used. The radical cure is extirpation. Many cases that I have operated upon have been well for years, and these previously were totally unable to work for months. There are eases, however, that may be cured entirely without being operated upon; but, as a rule, extirpation is the only

radical cure. The following salve will be found beneficial where diet and regularity are also observed:

R	Acidi tannici3i.
	Extracti belladonne
	Extracti opii
	Extracti stramonii
	Extracti hyoseyami
	Acidi carbolici
	Cosmolini
	M. ft. unguentum.

Signæ: Apply two or three times a day to the rectum.

FISSURE OF THE ANUS AND PROLAPSUS ANI—FALL-ING OF THE RECTUM.

I will merely mention these diseases, as they really need the careful attention of a good surgeon, if any enrative measures are resorted to other than what I recommend. The symptoms of fissure of the anus may be summed up in a few words: Great pain at stool, which becomes more severe and prolonged as the marked disease advances in severity. The stools may be with pus—matter—and blood. In prolapsus ani—falling of the rectum—the bowel comes down when straining at stool. This is due to humidity, relaxation or debility of the rectum. The bowel must, of course, be returned at once, which must be done by oiling the fingers and pressing it back; then apply a bandage with a pad to place over the anus. The following salve will be of service:

\mathbb{R}	Acidi tannici
	Acidi carbolici
	Unguenti zinci oxidi
	M. ft. unguentum.

Signæ: Apply three times a day in both diseases.

CYSTITIS.

Inflammation of the bladder may be either acute or chronic, idiopathie, traumatic or secondary. It may be due to gonorrhea, stricture, gravel, blisters of Spanish flies, cold or injury. All of the above causes may produce acute *cystitis*—inflammation of the bladder. Acute attacks, when not properly cared for and cured, usually become chronic if the patient does not die.

The symptoms are pain in the bladder, burning in the urethra, frequent desire to pass water, and but little is passed at a time, and often mixed with blood. The patient usually suffers from chills, attended with fever, and in severe eases vomiting, delirium and cold perspiration. In the chronic eases the symptoms are not so marked, and pain only severe at times.

Treatment.—In acute cases, a tea of flaxseed or slippery elm bark, given every one or two hours; if the fever is high one or two drops of the tineture of aconite root should be given every hour in water, and small pieces of ice, introduced into the rectum—bowel. For pain give one-fourth of a grain of morphine every two or three hours, to an adult. Open the bowels with easter oil, Roehelle salts or (F. 3). If the urine is acid, five to twenty grains of the acetate of potash may be given in mint water three or four times a day. or (F. 1), which will soothe the stomach and bowels and correct the acidity of the urine. Cloths wrung out of warm or cold water, whichever is the most grateful to the patient, and laid over the abdomen, are also beneficial. Injections of starch water containing twenty to thirty drops of laudanum, may be given every three to six hours, using from one-half to a teacupful at each

injection, which should be retained one hour or more to be of any benefit.

DYSENTERY.

This disease is an inflammation—colitis—of the colon—large gut—and may be either acute or chronic. It may occur in epidemic form or sporadically occasionally; it may also be of a bilious, intermittent, ulcerative or tuberculous character. It commences with pain in the lower part of the abdomen, soreness and tenderness on pressure, and frequent, small and bloody stools, with mucus intermingled. There is also great tenesmus—straining—with tormina—griping—and all acute cases have more or less fever. In malarial districts we usually have the fever, and the dysenteric symptoms intermit, as in fever and ague. In long continued cases, tubercles or ulceration of the bowels is the cause of its protractedness, and those cases are usually fatal.

Treatment.—If taken at its commencement the treatment may consist of a tablespoonful of castor oil, or less for children, according to age, adding from one to ten drops of laudanum, or a dose of Rochelle salts may be given. If there is much fever, give one or two drops of the tineture of aconite root every hour to an adult. If the fever intermits, give quinine every two hours in one, two or three-grain doses, or the following prescription:

M. Signæ: A teaspoonful every one or two hours; to a child one year old five to ten drops every hour. Great care is necessary in giving any medicine to young children which contains opium or morphine.

Starch water injections may be administered every three or four hours, containing from five to thirty drops of landanum, according to age. Mucilaginous drinks of flaxseed, slippery elm, or gum arabic are also good, and flaxseed poultices, mustard plasters, or hot cloths applied over the abdomen are very grateful, and even beneficial. If the abdomen is much swollen, apply equal parts of turpentine and lard, thoroughly mixed, and cover with a fomentation composed of hops, chamomile flowers and equal parts of vinegar and water, and then cover with oiled silk or oiled muslin, to keep in the heat. The diet in acute eases must be light, such as arrow root, sago or corn stareh; and as the natient convalesces mutton broth or soup may be given sparingly. If the case is chronie, cod liver oil will be of service, in tablespoonful doses, three times each day, with good nutritions food. If the patient is very weak, he may take a little wine or brandy three times a day, egg-nogg, beef tea, winewhey and toast.

LIVER COMPLAINT.

Congestion, hepatitis—inflammation of the liver—jaundice, cirrhosis—yellow pigment of the liver—fatty liver, waxy liver, syphilitic liver, cancer of the liver, hydatids, tuberele of the liver, dilatation of the gall-bladder, gallstones, hypertrophy—enlargement of the liver, atrophy—a morbid diminution in size—are all more or less difficult to diagnose correctly, as the symptoms of many of the diseases enumerated are very similar. I shall only attempt to give you the symptoms of congestion and inflammation of the liver. In congestion of the liver you will find the patient suffering with pain in the right side, usually of a dull aching character, with a sense of weight; the

skin is usually of a yellow color, as are also the whites of the eyes; nausea, a furred tongue, and a bitter taste in the mouth, especially upon arising in the morning; headache and *vertigo*—dizziness.

Treatment.—The treatment consists of blue mass in two-grain doses on going to bed, for three nights in succession; then follow with one-eighth of a grain of podophyllin every six hours till the bowels act freely, then give the following: (F. 50), and if in a malarial climate (F. 12); or the following formula will be found serviceable:

R	Aeidi nitro-muriatici diluti	SS.
	Tincturæ cinchonæ compositæ	ši.
	Tincture gentiane composite	iss.

M. Signæ: A teaspoonful before meals in one ounce of water, then rinse the mouth with a little water containing some baking soda, to prevent injuring the teeth with the acid.

The symptoms of acute inflammation of the liver are much the same as those of congestion, but more severe, and attended with fever, vomiting and diarrhea. This disease may also by mistake be called *qastro-hepatic* eatarrh. When the capsule of Glisson, or the membrane of the liver is alone involved—perihepatitis the pain upon pressure is considerable; little or no fever, and no jaundieed appearance. When abscess is forming in the liver, in addition to the symptoms already enumerated, we find the patient suffering with rigors—severe chills—every day, with a quick and feeble pulse, and rapid loss of flesh. The above are the symptoms of acute abseess. In the latent or cold form of abseess the symptoms are not so severe or marked, and are much more liable to be overlooked, even by the physician.

M

Treatment.—The treatment in acute cases, when the person is full-blooded and usually stout before the attack, should be begun by applying ten or twelve leeches to the side, followed by a blister. Give of (F. 3) one every two hours till they act freely, or half an ounce of Rochelle salts every three hours till the bowels move, then give the following mixture:

R	Tineturæ aconiti radicis	mxxx.
	Tincturæ veratri viridis	gtt.xx.
	Tincturæ digitalis	
	Tincturæ opii deodoratæ	
	Liquoris ammoniæ acetatis	
	Elixir simplicisad.	Ziii.

M. Signæ: Give two teaspoonfuls every two hours, or one every hour. If vomiting is obstinate put a mustard plaster over the stomach or (F. 49), or give (F. 1), as directed, to prevent vomiting.

The body should be sponged off every day, and if there is marked periodicity or intermission, give three grains of quinine every one or two hours until thirty grains are taken, or (F. 12).

In all the other forms of liver complaint enumerated, where treatment can benefit, I would recommend (F. 3) one pill every three hours till they act freely; then one every six hours, or the following:

Ŗ	Acidi muriatici	.zi.
	Extracti podophyllif	5i.
	Extracti leptandræf	3i.
	Tincturæ zingiberis	·zi.
	Tincture gentiane composite	5ss.
ſ.	Signæ: Take ten drops in water every three or	six hours.

If the pain is great, blisters will be beneficial. Hydatids, cancer, yellow atrophy, fatty degeneration, eirrhosis and gallstones, are all incurable and can only be palliated. I can, therefore, recommend only such

treatment as I have prescribed in the foregoing formula, with opiates and chloral hydrate to relieve pain.

CONGESTION OF THE KIDNEYS AND BLADDER.

The eause of these diseases is due to cold or to cantharides and turpentine taken into the system. The symptoms are, pain in the lumbar region; frequent desire to urinate with but little passed at a time, and frequently containing blood.

Treatment.—The treatment should be energetie; cupping or leeching the lumbar region, followed by a warm hip bath, or bottles of hot water, or boiled corn, on the ear, applied to the back; one tablespoonful of Rochelle salts should be given every three hours till it acts, or Parke, Davis & Co.'s eascara cordial, in teaspoonful doses every four hours, and drinks of flaxseed, slippery elm bark or gum arabie. Ten grains of Dover's powder may be given every three or four hours to relieve pain and produce copius diaphoresis sweating—and half a teaspoonful of sweet spirits of nitre every three or four hours to increase the flow of urine. The flow of urine is always diminished in this disease, and if not regulated may result in uramiapoisoning from the retention of urea in the blood, producing convulsions and loss of vision. It will require the same treatment as eongestion.

ACUTE AND CHRONIC NEPHRITIS-BRIGHT'S DISEASE.

The symptoms of inflammation of the kidneys are chilliness, headache, nausea, vomiting, oppression in breathing, pain in the limbs and back, dry skin and fever; general dropsy is soon present, the urine is seanty and dark, and contains blood and albumen.

Treatment.—The treatment is the same as for congestion just spoken of; the patient should live on liquid food. The chronic form may follow an acute attack, or come on gradually, following congestion, without any acute symptoms; the person may be afflicted for months before he realizes that he is really ailing; dropsy, convulsions, stupor, dizziness and a loss of vision, from disease of the retina—retinitis albumenurica—are the leading symptoms. The positive proof is to heat the nrine in a test tube; if there is albumen present it will show itself, on heating, in floceulent particles; and if albumen be present you can infer the patient has some form of kidney disease.

Treatment.—The treatment amounts to but little; tonics, with the addition of agents to keep up a sufficient action of the kidneys to prevent poisoning from retention of urea, is all that can be of service. The following prescription may be given, with advantage:

Ŗ	Acidi gallici
	Acidi sulphurici diluti3ss.
	Tincturæ lupuli
	Infusi lupuli

M. Signæ: A tablespoonful three times a day when the urine is smoky.

One tablespoonful of Rochelle salts should be given dissolved in water when needed to open the bowels, or give (F. 34) to keep up a gentle action of the kidneys and prevent uramic poisoning. The following may be given and will be beneficial:

R	Potassæ nitratis	zss.
	Tincture digitalis	zi.
	Spiritus juniperi compositi	O .
	Syrupi simplicis	Ži.
	Aquæ destillatæad.	
M.	Signæ: A dessertspoonful every two, three or for	

Tineture of iron may be given in doses of ten drops, diluted in water, three or four times a day. Cod liver oil may also be of benefit, when given three times a day; for the dropsical condition of the legs, and even the abdomen and chest, warm baths, catharties and diureties are demanded; of cream of tartar, one or two teaspoonfuls, and of jalap one-third of a teaspoonful, taken two or three times a week, or oftener, is beneficial, but should never be pushed to excess, as the removal of the dropsical effusion is only palliative and never aids in overcoming the disease. The food should be rich in albumen, such as meats, broths, and especially soft boiled eggs. Sweet milk is highly recommended, and should be used in large quantities, from one pint to one gallon a day. The clothing should be ample to protect from cold and wet. When the disease is well advanced the patient is liable to convulsions, and should not be permitted to be out alone, or in the house where there is an open fire, or coal oil lamps lighted.

GRAVEL.

This disease is known by small calculous concretions which may be voided with the urine. There is usually pain in the back, chilliness and fever during or following each attack. When a small gravel—calculus—is passing great pain is experienced. Persons afflicted with gravel usually suffer more after taking a cold.

Treatment.—Acetate and citrate of potassium are the best to render the urine alkaline; either one may be given in from twenty to thirty grains at a dose in three or four ounces of water, every four or six hours. Another excellent remedy is fluid extract of hydrangea aborescens, commonly known as sevenbarks. This

remedy was brought to the notice of the profession by the late S. W. Butler, of Philadephia, who wrote an excellent essay on its virtues as a remedy for gravel, which was published in the New Jersey Medical Reporter, October, 1850. I have used it in several eases very satisfactorily, and believe it to be almost a specific. It may be given in from ten to twenty-drop doses three times a day, but if given to excess it is said to produce vertigo—swimming of and pain in the head. Regular stone in the bladder can be removed only by a surgical operation, called lithotomy or lithotrity.

ENURESIS.

Incontinence, or dribbling of urine, is usually due to paralysis, either of the neek of the bladder or of the entire lower extremities. In children it commonly occurs at night.

Treatment.—Opium may be administered in from the one-twentieth $(\frac{1}{20})$ to the one-twelfth $(\frac{1}{12})$ of a grain to children eight to ten years old every three or six hours; extract of belladonna is also good, and may be given in from the one-twentieth $(\frac{1}{20})$ to the one-tenth $(\frac{1}{10})$ of a grain three times a day. The child should not be permitted to drink just before going to bed. (See therapeuties, in back of the book.)

INFLAMMATION OF THE BRAIN.

The first symptoms of inflammation of the brain are vertigo, pain in the head, noises in the ears, troubles of vision, numbness and difficulty of speech. The disease is frequently preceded by an epileptic convulsion; often, for the first few hours, the patient is very sensitive to noises of any kind, such as talking or slamming the doors, or anything that will jar the build-

ing. There is frequently increased sensibility to the touch, with bright flashes or sparks shooting before the eyes and great intolerance of light. After a few days the hearing and sight become impaired and finally paralysis supervenes; the eyes frequently become crossed and one side of the face often becomes contracted. The chances for recovery are few; most patients die under any care or treatment.

Treatment.—If the disease is recognized at the commencement, free venescetion—bleeding—should be resorted to, but only in the commencement. Purging with (F. 3), Rochelle salts, or citrate of magnesia is good; then keep the bowels open. Tineture of aconite root should be given in two or three-drop doses every hour, and ten grains of ealomel, divided into five powders, and one powder given every two or three hours. Constant sponging of the head is beneficial, or icebags or bladders containing ice may be applied. I prefer frequent sponging; blisters to the head and back of the neek are serviceable as the intensity of the disease subsides. The diet should be light at first, but as the patient becomes weak the system must be sustained by the use of stimulants, beef tea, or beef extraet, and wine, whisky, brandy, egg-nogg or milk punch sparingly.

SCROFULOUS ENCEPHALITIS-TUBERCULAR MENINGITIS.

This disease is common to strumous children from two to fourteen years, and usually comes on insidiously. The patient complains of headache, is fretful, pettish and inclined to lay around, or lay its head in the mother's lap, with vomiting, loss of appetite and diarrhæa, or eostiveness; its sleep is disturbed, and it often eries out or gives a squeal, which is often ealled the eerebral squeal. As the disease advances stupor or even coma—insensibility—eomes on. Those cases all die.

Treatment.—Treatment would seem useless in a hopeless disease, but as no physician can at all times be sure of the diagnosis, it is better to give the same treatment as in inflammation of the brain. Bleeding, however, should not be thought of. In protracted eases iodide and bromide of potash may be used; the iodine in one-half to one or two-grain doses every three or four hours, and the bromide in three to five-grain doses every four hours. Beef tea, mutton, or chicken broth and milk should be the principal nour-ishments.

Hydrocephalus, or Dropsy of the Brain; Ramollissement, or Softening of the Brain; Myelitis, or Inflammation of the Spinal Marrow; Softening of the Spinal Marrow and Spinal Irritation.

All of these nervous diseases enumerated are so closely allied in symptoms that it would be useless to enter into a description of each. In all brain and nervous disorders physicians should be employed at once, for, even in the most skillful hands, such eases usually die.

COUP-DE-SOLEHL-SUNSTROKE.

This difficulty has two forms of attack; one, congestion of the brain from the direct rays of the sun; the other, exhaustion when not exposed to the direct rays of the sun. In real sunstroke the patient usually falls from his feet without any warning; becoming insensible, the face livid—blue; breathing slow and sterterous—

snoring—as in apoplexy; the head is very hot; the temporal arteries and veins full; and in severe eases the patient often has eonvulsions; this is often called heat apoplexy. In heatstroke, which is the most common, the individual is also stricken down suddenly; there is an undue amount of heat in the head, but not complete uneonsciousness, or sterterous breathing. In this state the symptoms are more like fainting fits than those of sunstroke. This form of disease attacks those who work in the shade and feel secure from the dangers of excessive heat. Persons addicted to the exeessive use of alcoholic stimulants, or intemperate in eating, are more liable to be overcome than the temperate; yet even the very temperate may and do suffer. Drinking cold water or ice water is also calculated to favor it.

Treatment.—The treatment of heat apoplexy, or sunstroke proper, should be energetic and given at once. Apply ice or cold water to the head, to lower the temperature, or sponge off the entire head and face, not stopping a moment, until the head is perfectly cool. A little blood may be taken from the arm-from half a pint to a pint-if the patient is full-blooded, but if anamic-bloodless-then leeching the nape of the neck or cupping, whichever is most convenient, and apply mustard plasters to the limbs and feet, and along the spine; keep the head and shoulders raised: administer a brisk eathartic as soon as the patient can swallow, (F. 3) or Rochelle salts. Heat exhaustion requires stimulating treatment, but no bleeding; cold water to the head or frequent sponging. When the patient can swallow, give ten to twenty drops spirits of chloroform or aromatic spirits of ammonia every fifteen minutes. Ammonia may be also carefully applied to the nose at intervals until the patient can swallow. Mustard should be applied to the spine and feet.

RETENTION OF URINE, OR ISCHURIA AND DYSURIA.

Retention of the urine—strangury—may be due to blisters, from the effect of a dose of opium or morphine, paralysis or inflammation of the neck of the bladder or urethra, or from spasms; it may also arise from congestion or inaction of the kidneys.

Treatment.—If the bladder is full the water must be drawn off with a catheter, if warm sitz baths or hot fomentations will not remove it. If it is due to inaction of the kidneys, then it is necessary to use diurcties to increase the flow of urine. The following will be found beneficial in congestion of the kidneys:

R	Potasse acetatis3ii.
	Tincturæ digitalis
	Spiritus ætheris nitrici
	Spiritus juniperi5ss.
	Aquæ destillatæ
	Syrupi altheaad. 5vi.
M	Signæ: A tablespoonful every three or four hours

Parsely or watermelon seed tea is also good; bottles of hot water should also be applied to the back and feet and the patient kept in bed.

INSOMNIA.

Inability to sleep the proper amount, or wakefulness for weeks or months, is due very often to passive eongestion of the brain, brought about through excessive mental labor, grief, strong coffee or tea used to excess, or the excessive use of alcoholie drinks. This

disease, if allowed to continue for some time, will become chronic and difficult to cure.

Treatment.—The treatment should consist of warm baths—especially the vapor or Turkish bath. Bromide of potassium may be given in doses of from ten to twenty grains, or the following prescription will be found beneficial:

R	Sodii bromidi
	Potassii bromidiāā. 5ii.
	Extracti ergotæ
	Tincture zingiberis5ii.
	Aquæ destillatæ
	Syrupi simplicisad. Ziv.
M.	Signa: Give a dessert spoonful every two or three hours.

Hydrate of chloral is also very good, and may be given in ten to twenty-grain doses to adults every two hours. Lactnearium and lupuline may be given, or eypripedine and seutellarine, in from three to five grains, every two or three hours.

NIGHT TERRORS.

This disturbance or fright of children during sleep is quite common. Children who have been apparently well on going to bed will ery out in terrible fright, imagining some terrible fate is about to befall them. It is sometimes quite difficult to arouse them fully to consciousness, and they may continue in this excited state for half an hour or more. This difficulty is usually brought about by overcating, or cating food difficult of digestion, worms or constipation.

Treatment.—The treatment consists in bathing the children twice or three times a week, wholesome diet, (not "healthy diet" as is the custom to speak), being careful they do not cat too much. Most children will

overload the stomach if permitted to do so. Bathing the face with cold water will usually arouse them at once. Avoid the cause. A cathartic of castor oil, Rochelle salts or (F. 3), and one or two grains of bromide of potassium before going to bed. If there is sourness of the stomach, which often disturbs their rest, (F. 1) will be found very beneficial.

APOLLEXY.

This malady gives its victim but slight warning of its approach. The person falls from his feet in a comatose—insensible—condition. Breathing labored, and the pupil of one or both eyes dilated; pulse slow; head hot, and a fullness of the blood vessels of the face and neck. There are perhaps four forms of the disease: Congestive, hemorrhagic and by embolism and thrombosis. Embolism—plugging up of an artery; thrombosis—plugging up of a vein of the brain by a blood clot. All forms are mostly fatal, and when recovery takes place it is usually only partial or incomplete.

Treatment.—The treatment in this disease, when first attacked, should be to bleed, earefully watching the pulse, and if it becomes stronger and more regular, and the breathing improves, take six to ten ounces of blood, but if the contrary, stop the blood at once. Give a cathartic of Rochelle salts or (F. 3), and the following prescription:

R	Sodii bromidi
	Potassii bromidiāā ʒii.
	Extracti ergotæf\(\frac{7}{2}\)ss.
	Aquæ cinnamoni
	Syrupi simplicis
M.	Signæ: Give a dessertspoonful every two hours.

Mustard may be applied to the legs and along the spine, and enps to the back of the neck, and the head should be frequently sponged, to keep it cool. In very old or debilitated patients bleeding should not be attempted, as it would only hasten death.

PARALYSIS.

This affliction may be local, with only a particular nerve paralyzed; or it may be one-half of the body, the entire body, or the extremities, leaving the arms and chest sound. This difficulty may be due to a local inflammation or a lesion of the brain or spinal cord, such as blood clot, *embolism*—plugging up of an artery—tumor or softening.

Treatment.—The same treatment may be pursued as in apoplexy. There are many eauses of paralysis; we have reflex, diphtheritic, syphilitic, mercurial and local paralysis, also shaking and wasting palsy. Then we have another type of nervous affliction called *locomotor ataxia*; in this form the person walks with an unsteady, jerking gait, not dragging, as in paralysis proper. This disease is due to an altered condition of the spinal cord, and is in most instances incurable. Children are also afflicted with paralysis; in all such cases employ a good physician at once.

EPILEPSY.

This disease is common to both old and young; the attack may be violent, the person falling backward on the street. It is frequently called falling fits or sickness; in the milder forms the person may not fall, but the ideas become confused, attended with a wild expression of the eyes. This disease is difficult to cure; many eases may be cured, especially in young people, but very many are incurable. I have treated

a few eases that have entirely recovered, but have met with many failures. It may continue for years before death ensues, and the sufferer may become very silly or idiotic.

Treatment.—The treatment consists of being temperate in eating and drinking and the avoidance of excessive sexual indulgence or self-pollution, which may even induce this disease; regularity in bathing and sleeping; avoid excitement of all kinds, and never use alcoholic stimulants or tobacco. The following prescription of Dr. Brown-Sequard, of Paris, France, will be of benefit in many eases:

\mathbf{R}	Potassii iodidi	.gi.
	Potassii bromidi	.ži.
	Ammonii bromidij	Ziiss.
	Potassæ bicarbonatis	
	Infusi calumbæ	

M. Signæ: Mix and give one teaspoonful in water before each meal and two teaspoonfuls before going to bed.

CATALEPSY.

This disease is due to an anæmic—bloodless—condition; it is periodic in its nature, and is attended with unconsciousness and a rigid condition of the arms or legs, so much so that they will remain in the position in which they may be placed. The attack is of short duration, and is not amenable to any special treatment.

Treatment.—Tonies, such as iron and cinehona, are beneficial; also, the elixir of calisaya bark and iron given in teaspoonful doses every three hours. Dialyzed iron, from twenty to thirty drops, three times a day, or ten drops of the tineture of iron largely diluted in water, three times a day. Fresh air and a proper

amount of physical exercise, proper clothing and regularity of bathing, good nutritions food, properly cooked, are essential to a recovery.

CONVULSIONS.

The different kinds of convulsions are puerperal, hysterical, epileptic and infantile. The form which every family may have to contend with is the infantile form. The exciting causes are various: Uræmia, following scarlet fever, whooping cough, worms, constipation, fever, teething, spinal meningitis, injuries and fright.

Treatment.—The treatment consists in removing the cause when possible. For immediate relief the very best treatment is to give from the thirteenth to the sixteenth of a grain of apomorphia, according to age, by hypodermic injection. This has frequently arrested convulsions in patients unable to swallow the medicine. If it relieves at all it will arrest the convulsions in from five to fifteen minutes. Bathing the patient in warm water and placing mustard plasters along the spine are also good. When the patient can swallow, give one to five drops of the tineture of gelseminum every half hour or hour, or one or two grains of bromide of potassium or sodium, dissolved in water, every half hour, or the following:

Ŗ	Sodii bromidi
	Kalii bromidiāā. 3i.
	Tincturæ gelsemini
	Aquæ cinnamoni
	Elixir simplicis

M. Signæ: A teaspoonful every half hour or hour.

Or the following may be given:

Ŗ	Chloralis hydratis3ss.
	Sodii bromidi
	Ammonii bromidi
	Tincturæ digitalisgtt.xx
	Tincture veratri viridisgtt.x.
	Aquæ menthæ viridis
	Syrupi simplicis
	NATIONAL PROPERTY OF THE PROPE

M. Signæ: Give a teaspoonful every half hour or hour till easy.

When the patient has worms, one-eighth $(\frac{1}{8})$ of a grain of ealomel may be given until four powders are taken, or the following prescription may be used:

R	Hydrargyri chloridi mitisgrs.i.
	Santoninigrs.i.
	Saechari lactisgrs.x.
	M. ft. chartulasNo.viii

Signæ: Give one every two or three hours.

CHOREA-ST. VITUS DANCE-ST. ANTHONY DANCE.

The Symptoms are irregular movements of the muscles; when the patient is asleep all irregular movements of the muscles cease. This disease usually lasts about four weeks, but many eases last for months. All eases usually recover when there is no complication, such as softening of the brain or spinal cord, or endocarditis or pericarditis. Blows upon the head, fright, overwork, mental anxiety, falls, and harsh treatment may produce it.

Treatment.—The treatment consists of good diet; well cooked; regularity of habits, in sleeping, eating and bathing; plenty of air and exercise, but not excessive mental or physical labor. Extract of eimicifuga, given in from twenty to thirty drops at a dose every three hours, will be found very beneficial; or macrotin, given in grain doses every three or six hours.

Fowler's solution of arsenie is also given, in from one to four drops diluted in water, after meals. Where complications exist, they must be treated according to their character. (See remedies in therapeutics, in the back of the book.)

TETANUS-TRISMUS-LOCKJAW.

This disease is known by contraction of the muscles. Trismus—lockjaw—is one form of tetanus. When the difficulty becomes general, there is often such rigidity of the muscles of the back that only the heels and head touch the bed, the abdomen projecting, forming part of a circle. The nature and pathology of the disease is not well understood, and the treatment is usually very unsatisfactory.

Treatment.—The tineture of Calabar bean—physostigma venenosum—is recommended, and has been given in doses from ten to one or two hundred minims. Of eighteen cases reported by Dr. E. Watson, ten recovered through its use. Hypodermic injections of apomorphia are occasionally beneficial for temporary relief of the spasm, giving the one-twentieth $(\frac{1}{20})$ of a grain hypodermically every half hour till relieved or till three doses are given. When it results from injury, cutting into the part and applying hydrate of chloral is said to be very good; it may also be given internally, in from ten to twenty-grain doses, every two or three hours, to adults. Many other remedies have been used with variable effect. Almost all cases die.

HYDROPHOBIA.

This is the result of a wound or bite of a rabid animal, usually a dog, but it may be from a eat or other animals.

Symptoms.—The disease may make its appearance in a month after the person is bitten, or the poison may remain dormant for years. There is great thirst, and an inability to swallow when water is offered, angry and very violent delirium and inability to sleep. The patient often tries to bite, and foams at the mouth. Such cases usually die in from four to ten days.

Treatment.—No treatment is curative. Chloroforming or hypodermic injections of morphine of from one-sixth $(\frac{1}{6})$ to one-half $(\frac{1}{2})$ grain, given every one, two or three hours, relieves some, or apomorphia is still better given hypodermically in doses of the one-sixteenth $(\frac{1}{16})$ to the one-tenth $(\frac{1}{10})$ of a grain. When bitten by a ferocious dog the safest plan is to have the piece cut out at once or burn thoroughly with lunar caustic. Chloral hydrate may be given in doses from ten (10) to twenty (20) grains every two or three hours. The superstitious notion that killing the dog will be beneficial to the sufferer is the worst form of ignorance. Killing rabid animals before they have bitten any one is the only sensible course.

HYSTERIA.

This is a very annoying difficulty and one that often tries the patience of the physician and the family. It is a morbid *neuroses*—depression of nerve force—and may be due to uterine disorder, excessive *venery*—giving away to the passions—or an accumulation of gas in the *colon*—large gut—which will be relieved as soon as the gas escapes. Men may have it, but it is rare; whilst it is common to females.

Treatment.—The management of this disease will often worry the ablest physician, and demands very

close investigation to be able to treat successfully. For immediate relief hypodermic injections of one-sixth $\binom{1}{6}$ of a grain of morphine may be given, or chloral hydrate internally in from ten (10) to twenty (20) grain doses, or bromide of potassium or bromide of sodium in doses of from ten to twenty grains every one, two or three hours. Regulate the bowels with Rochelle salts or (F. 3). Hoffman's anodyne may also be given in emergencies in half teaspoonful doses every half hour or hour in water. The clothes should be loosened and the face bathed in water and ammonia held near the nose. Chronic hysteria is still more difficult to manage. If due to womb disease, the services of a good gynecologist will be needed to properly treat the womb, as many cases will need local treatment, which can only be given successfully by a skilled physician.

NEURALGIA.

This disease is simply a nerve pain and may attack any part of the body. When the face is attacked the affliction is termed tic doulourcux; if the side of the head, hemicrania; if the side, pleurodynia; if the stomach, gastrodynia; if the back portion of the hip and extending down the back portion of the thigh, sciatica; if the heart, angina pectoris. This disease is probably due to an irritation or an inflammation of a nerve or nerves, and may be either acute, sub-acute or chronie, and may be due to various causes, such as decayed teeth, cold or catarrh of the head, and especially malaria. When in a malarial district it invariably assumes an intermittent or periodical character, and frequently begins at sunrise and disappears at sunset; when it assumes this type it is commonly called sun pain.

Treatment.—The treatment is usually quinine, with

opium or gelseminum. When the teeth are at fault have them filled or extracted, and give (F. 5) or the following prescription, if there are chills, or if it is periodic in its attacks:

R	Quiniæ sulphatis	iiG.	
	Acidi tannici	0	(7
	Tineturæ gelsemini		٠
	Tincturæ opii deodoratæ	0	
	Spiritus lavendulæ compositi	.zi.	
	Syrupi zingiberisad	Ziii.	

M. Signæ: A dessertspoonful every two hours.

The bowels should be opened with (F. 3), or Rochelle salts may be given in tablespoonful doses, every three hours till an action of the bowels is secured, or (F. 14). The easeara cordial, manufactured by Parke, Davis & Co., is an excellent eathartic and pleasant to take. Hot fomentations applied to the part are also serviceable. Apply locally (F. 7). Hot foot baths are very good; exposure to cold or wet will increase or prolong the attack. When the disease is chronic or of long standing it requires very different treatment. Then (F. 2) should be given after each meal, one to four pills at a dose, and (F. 5) one pill every three or four hours. An ointment (F. 53) may be applied over the face and forchead in tie douloureux—facial neuralgia.

APHASIA.

"By aphasia is understood a condition produced by an affection of the brain by which the idea of language, or its expression, is impaired." (Hammond's Diseases of the Nervous System.) Persons thus afflieted are frequently unable to write their names in full, but may embody something else with the name. It may also occur in hysterical persons where there is no real brain disease. I treated one case which recovered at once when I told her that I had to give her very powerful shocks of electricity. The next day when I called at her house she was able to talk as fluently as ever, and has never had a return of it. In all such cases I would recommend the employment of a physician.

HEMORRHAGES.

These are simply the result of injury or disease. Hæmaptysis—bleeding from the lungs; hæmatemesis vomiting blood from the stomach; epistaxis—bleeding from the nose; postpartum hemorrhage—flooding after delivery; menorrhagia—excessive flow during the menses; metorrhagia—flow between regular menstrual periods; hamaturia—bleeding from the bladder or kidneys; intestinal hemorrhage—bleeding from the bowels. Hemorrhage from the mouth is frequently due to seurvy or diseased gums, or from the nose. Persons are frequently frightened, supposing it to be from the lungs. Vicarious hemorrhage is the result of suppressed menses, the flow coming on in the form of hemorrhage instead of the natural way. In all bad eases send for your physician at once, and do all you ean to arrest it whilst waiting for his arrival. If from the nose, snuff up alum or salt water, and hold either alum or salt in substance in the mouth. Bathe the head and face in cold water, remain quiet, and do not blow the nose; plugging the nose, both behind and in front may be necessary, but your physician must do that with an instrument for that purpose. Bleeding from the lungs may be checked by giving small doses of salt every fifteen minutes, or small pieces of ice may be swallowed or held in the month, or a half teaspoonful of the fluid extract of ergot every half hour or hour internally, or small doses of ipeeae, giving two or three grains every half hour or hour. Bathe the feet in hot water. In bleeding from the stomach, small pieces of iee may be given to swallow every five or ten minutes, and a mustard plaster may be placed over the stomach and along the spine. Keep the patient from drinking fluids; use hot applications for the feet, and give hypodermic injections of Parke, Davis & Co.'s liquor ergotæ purificatus, dose from five to twenty drops, or one-third of a grain of ergotine at a dose every two or three hours. The other forms of hemorrhage will be spoken of when treating on the eauses that produce them.

DROPSY.

This is not a disease but the result of various diseases, such as disease of the liver, lungs, kidneys and heart. Ovarian dropsy seems to be an independent form of this disease. The treatment must be directed to the cause. See diseases mentioned. Give (F. 35) and tineture of digitalis in two to ten-drop doses every three hours; also catharties and agents to produce copious sweating. Always send for your physician in case of dropsy, so that you may receive proper treatment; and remember, if he calls dropsy a disease you can rest assured he does not understand your case, and you had better consult a more learned physician. Always ask your doctor the cause of your dropsy; if he does not make a careful examination of your chest, heart, urine and stools, you can well fear to trust him.

ACUTE DISEASES.

SMALL-POX-VARIOLA.

Varieties: Discreet and confluent; also, varioloid, modified from the effects of vaccination. The stages are incubation, primary fever, eruption, secondary fever, and disquamation—scaling off of the scabs. The severity of the disease is in proportion to the amount of eruption.

Treatment.—Good nursing and ventilation. Keep the bowels open with Rochelle salts or citrate of magnesia, and the following prescription for fever:

R	Tincture aconiti radicis
	Tincturæ opii deodoratæ5ii.
	Tincturæ digitalis3ss.
	Tincture gelsemini3ss.
	Liquoris ammoniæ acetatis
	Elixir simplicis ad. \bar{z} iv.

M. Signæ: Give to an adult a tablespoonful every two or three hours; to a child one year old six to ten drops, or one-twelfth of the dose for a grown person.

For local application take of the following: Collodion, five and a half ounces; glycerine, one-half ounce, and of carbolic acid, pure, two teaspoonfuls, shake well and apply with a camel's hair brush, and keep the surface covered.

WHOOPING-COUGH-PERTUSSIS.

This disease usually commences like a cold; after a week of fever and cough, it begins to show its charac-

ter. The duration of the disease is about six weeks, and it is quite fatal to very young children. It usually occurs but once in the same person, and is *contagious*—eatching.

Treatment.—Keep the bowels open with (F. 3) or Rochelle salts, or easter oil, easeara eordial, given from ten to twelve drops to a child every two hours, and give (F. 4) for the cough. Should the patient have intermittent fever with it, give to small children the following mixture:

Ŗ	Quiniæ sulphatisgrs.x.
	Acidi tannicigrs.v.
	Tincturæ sanguinariægtt.x.
	Vini ipecacuanhæ3i.
	Syrupi tolutaniad. Žii.

M. Signæ: Give a teaspoonful to a child ten years old every two hours; to a child one year old, ten drops; to a babe six months old, two to three drops.

DIPHTHERIA-PUTRID SORE THROAT.

This is a dangerous disease, and requires the best of medical treatment from the first. Parents should send for a good physician at once.

The Symptoms are fever, sore throat, with white or gray patches on the tonsils, and a husky voice. Be on your guard, parents, when the dreaded malady is raging, and when your children are attacked lose no time in getting a good physician. The croupous form is very fatal to children, and frequently follows searlet fever and measles.

The Treatment should be of a stimulating and sustaining nature from the beginning, such as egg-nog, beef tea, milk, brandy and water. Use the following:

R	Potassii ehloratis	zii.
	Tineturæ acouiti radicis	
	Tineturæ ferri ehloridi	
	Aquæ puræad.	

M. Signæ: Put one-third of the above to a glassful of cold water, and then use as a gargle every hour, and have the patient swallow a small teaspoonful each time.

In addition give the following:

R	Quiniæ sulphatisЭi
	Aeidi laetiei
	Tineturæ opii deodoratæ3i.
	Tineturæ gelsemini3ss.
	Syrupi zingiberis ad. \(\bar{\pi}\)iii.

M. Signæ: Give a small teaspoonful every two hours to a child one year old; to an adult, a tablespoonful every two hours.

Keep the bowels open with (F. 3), Rochelle salts or caseara cordial, and keep the bedding clean, and all the children not attacked in another part of the house, and be careful to wash the spoons used in giving the medicine, and keep them standing in the following solution in a glass or teacup: Carbolic acid, one teaspoonful; water. one-half pint, thoroughly mixed.

SCARLET FEVER-SCARLATINA.

We have three varieties, simplex, anginosa and maligna; the simple, the throat variety, and the malignant. In the simple form the patient frequently does not remain in bed; the fever is slight and the eruption well defined; the throat symptoms are slight or none at all. In the anginosa—throat—type the violence of the disease seems to fall upon the tonsils; they frequently suppurate and discharge large quantities of pus—matter—or they are covered with a white, gray or brown membrane. After the cruptions disappear,

absecsses may form on the neek and exhaust the patient. This disease also often passes up the eustachian tubes to the *tympanum*—drum of the ear—and may result in deafness. The malignant type is often so violent that the patient may die in a few hours.

R	Tincturæ aconiti radicis	mxx.
	Tincturæ digitalis	.gtt.xxx.
	Tincturæ belladonæ	.gtt.x.
	Acidi nitro-muriatici diluti	·3i.
	Syrupi simplicis	. Z i.
	Aquæ cinnamoniad	. Ziii.

M. Signæ: Give a desscrtspoonful every one, two or three hours; for a child one year old, five to ten drops.

Keep the bowels open with Roehelle salts or eitrate of magnesia. Give the patient plenty of eold water to drink, and if the throat swells and the heat is great, apply eold wet cloths to the throat; but if the heat is low, warm wet eloths. When the patient shows signs of exhaustion, give egg-nogg, whisky punch, beef tea, and milk punch, being eareful not to give too much at a time. Bathe the entire body with tepid water often if the heat is high; when low, with whisky and warm water. See that the patient urinates freely; and if not, give parsley root tea freely, or sweet spirits of nitre in half teaspoonful doses, every two or three hours, to a grown person; two to three drops to a child one year old.

Treatment.—Dropsy and rheumatism may follow, which must be treated by giving the patient vapor baths once a day. Pour a wash-boiler full of boiling water into a tub, then set a split-bottom chair in the tub, remove the patient's clothing, put him on the chair, with the feet in warm water and a

blanket around him. Give cold water to drink; bathe the head often, and keep him there till he sweats freely; then shower with water warmed to 98°-99° F., and rub down well, and afterwards give half a teaspoonful of dialyzed iron three times a day.

INTERMITTENT FEVER-MALARIAL FEVER-CHILLS-FEVER AND AGUE.

In this disease we have three types, viz: Quotidian, tertian and quartan—every day, every second and every third day; then we may have the double—two paroxysms each day. The stages are the cold, hot and sweating. The cold stage or chill begins with languor, yawning and a sensation of coldness, often even shaking till the teeth chatter, which is, however, not always the case; chills up the back, finger nails and lips blue, skin dusky and shrunken, and the feet and legs often feeling numb, or as if asleep. The temperature of the body is not lower, as most persons would imagine, but, on the contrary, usually elevated or above the natural heat of the body, which is $98\frac{1}{2}^{\circ}$ in health. Headache, thirst, drowsiness, depression of spirits, with occasional vomiting, is common. The cold stage lasts from a few minutes to two or three hours, averaging about half an hour.

The hot stage now commences, warmth gradually returns, the pallor vanishes and the face becomes flushed (red), the heat of the body increases, and may run from 105° to 110° by thermometer, but seldom higher than 108°. The mouth is dry, the tongue coated with a yellowish white coat, violent headache, vomiting, and frequently convulsions in children. The bowels are constipated, skin dry, urine scanty and red. This stage may last from one to eighteen hours.

The sweating stage comes on gradually, following the hot stage. The face first becomes moist, then the whole body, the vomiting and headache disappear and the patient becomes quiet and goes to sleep. Of the three stages one or two may be wanting. When no chill is experienced, and the fever and sweating stages occur regularly, then it is usually called the dumb ague. Intermittent neuralgia frequently occurs in districts where ague is common; it is often called sun pain, coming at sunrise and going at sunset.

Treatment.—The treatment necessary in such attacks consists in reducing the fever with one to three-drop doses of the tineture of aconite root every half hour or hour, or tineture of gelseminum given in from one to ten-drop doses every hour till the fever is gone. The best plan is to put twenty to forty drops of the tineture in a glass, and put in twenty tablespoonfuls of cold water, then give a tablespoonful every half hour or hour, or give (F. 25). If vomiting is present, with great pain in the head, use (F. 1) as directed till vomiting and headache ecase, or any of the remedies mentioned in Therapeutics (see back of book), to check vomiting.

The remedies to prevent a return of the paroxysm, or chill, must now be used. During the intermission use (F. 3), or let the patient take a cathartic, to act on the liver, one-fourth to one-half grain of podophyllin every six hours till it acts. You must also commence at once with (F. 2), as directed, or take, of quinine, twenty to thirty grains; hydrastine, ten grains; eapsicum, five grains, mix and divide into ten powders or pills, and give one every two hours, or (F. 12). The above course must be kept up each day until the patient is cured. If the patient vomits up the medicine, put $\frac{1}{3}$ of a

grain of ipecac in a glassful of cold water, and give a teaspoonful every ten minutes and apply mustard over the stomach or (F. 49); sponge off the entire body once a day, and the face several times during the hot stage.

THE AGUE.

Onee upon an evening bleary,
While I sat me dreaming, dreary,
In the sunshine, thinking over
Things that passed in days of yore,
While I nodded, nearly sleeping,
Gently eame a something ereeping,
Creeping upward from the floor.
"'Tis a eooling breeze," I muttered,
"From the regions 'neath the floor;
Only this, and nothing more."

Ah! distinctly I remember—
It was in that wet September,
When the earth, and every member
Of ereation that it bore,
Had for weeks and months been soaking
In the meanest, most provoking,
Foggy rain that, without joking,
We had ever seen before;
So I knew it must be very
Cold and damp beneath the floor—
Very cold beneath the floor.

So I sat me, nearly napping,
In the sunshine, stretching, gaping,
With a feeling quite delighted
With the breezes 'neath the door,
Till I felt me growing eolder,
And the stretching waxing bolder,
And myself now feeling older,
Older than I felt before;
Feeling that my joints were stiffer
Than they were in days of yore,
Stiffer than they'd been before.

All along my back the creeping
Soon gave place to rustling, leaping;
As if countless frozen demons
Had concluded to explore
All the cavities—the varmints—
'Twixt me and my nether garments,
Through my boots into the floor;
Then I found myself a-shaking,
Gently shaking more and more,
Every moment more and more.

'Twas the ague; and it shook me
Into heavy clothes, and took me
Shaking to the kitchen, every
Place where there was warmth in store;
Shaking till the china rattled,
Shaking till the morals battled;
Shaking, and with all my warming,
Feeling colder than before;
Shaking till it had exhausted
All its powers to shake me more,
Till it could not shake me more.

Then it rested till the morrow,
When it eame with all the horror
That it had the face to borrow,
Shaking, shaking as before.
And from that day in September—
Day which I shall long remember—
It has made diurnal visits,
Shaking, shaking; oh, so sore!
Shaking off my boots, and shaking
Me to bed, if nothing more,
Fully this, if nothing more.

And to-day, the swallows flitting
Round my cottage see me sitting
Moodily within the sunshine,
Just inside my silent door,
Waiting for the ague, seeming
Like a man forever dreaming;
And the sunlight on me streaming
Casts no shadow on the floor,

For I am too thin and sallow
To make shadows on the floor,
Naught of shadow any more.

-Phrenological Journal.

BILIOUS-REMITTENT FEVER.

This is simply another form of malarial fever, and requires exactly the same remedies to break it up. It does not intermit, but remits; the fever comes and goes, but there is no *sweating stage*, and the patient is never entirely free of fever till the disease is broken up entirely, which often requires one or two weeks

Treatment.—The treatment in this type of fever is the same as in intermittent, only you must give (F. 12) during the time the fever is the mildest, and continuation aconite all the time, or (F. 25); the bowels and liver must also be attended to, using (F. 3), and for sick stomach or headache (F. 1). The entire body should be sponged off once every day with water not too cold, and the hands and face several times a day; this will cool off the fever and be refreshing to the patient.

PERNICIOUS FEVER—CONGESTIVE FEVER—CONGESTIVE CHILLS.

The skin grows pale and shrunken, looks blue and is sometimes bathed in a cold, clammy sweat; the countenance looks anxious, vomiting is often a distressing attendant, and blood is frequently vomited and passed from the bowels with the stool. The patient is restless but knows what is going on unless the brain is attacked, then there is stupor and at times insensibility, and convulsions frequently occur. This disease is grave in its nature and must be treated energetically

or death will be the result thereof. During the attack stimulants must be used, both internally and externally; give the patient good whisky, which can be given in teaspoonful doses, when the brain is not implicated, but if the patient is insensible do not give the whisky, but give (F. 37) and rub the entire length of the spine with (F. 7), then apply hot bricks or bottles containing hot water along the spine and to the feet. For siek stomach, vomiting and pain use (F. 1) and put a mustard plaster over the stomach after first applying (F. 7). As soon as the eongestion has subsided give (F. 3) or (F. 14), and in addition invariably give three powders of quinine of ten (10) to twenty (20) grains each every four hours. Should the paroxysm or chill return the next day the same course must be pursued; if not, continue the quinine or formulas.

CEREBRO-SPINAL MENINGITIS-SPOTTED FEVER.

This is a disease of the membranes of the brain and spinal cord; either one may be affected, or both may be implicated. "We use the term *epidermic cerebro-spinal meningitis* to define an acute diffuse inflammation of the pia mater of the brain and spinal cord, with deposit of a fibrino-purulent exudation."—*Ziemssen's Cyclopædia*, vol. 11, p. 687. This disease is very fatal. "The mortality will average about 40 per cent."—*Ziemssen's Cyclopædia*, vol. 11, p. 733.

Many who recover are injured by its ravages. Its duration is varied; it may terminate in death in a few hours, or last for days, weeks or months. Those that survive the third day, usually recover, but many linger for weeks and perish at last. I knew of a babe only nine months old stricken down with the disease, near War-

rington, Hancock county, Ind., who survived three months; it had tonic spasms the entire time, and was reduced to a mere shadow and then died. An elder sister, aged ten, was stricken down after washing the dishes for her mother, after tea, and she died about four o'clock the next morning. This disease has been described as far back as 1310, in France, and its fatality and character has also been spoken of all over Europe as early as 1503, and in the United States as early as 1806. It has raged as an epidemic in the United States and many parts of the world at different times, whilst sporadic scattered cases—are constantly occurring. The patient is usually taken suddenly with a rigor—sudden coldness or chill-attended with excessive pain in the head, spasm of the muscles of the back and limbs, usually forming an arch, as in tetanus. The eyes are frequently crossed; there is also hyperesthesia—excessive sensitiveness—to the touch, for the first few days. Nausea and vomiting is also usually present in the beginning; loss of hearing and sight is common after the fifth or sixth day.

Treatment.—The treatment is so unsatisfactory that I shall simply give you some suggestions as to the best course to pursue until a physician arrives. When first taken it is the congestive stage, and the very best you can do is to remove all the clothing, and envelope the patient in a blanket, wrung out of hot water, and apply quite warm, almost hot, leaving only the head bare; then cover with a dry blanket, and, if in winter, sufficient clothing to keep the patient warm and sweating. A mustard or capsicum plaster may be applied along the spine before applying the hot pack, permitting it to remain when in the pack. During

the congestive stage hot wet cloths applied to the head as hot as ean be borne, is a course much more rational and beneficial than cold applications. I have also great faith in very stimulating injections into the rectum, composed of from five to thirty grains of capsieum, and from five to thirty grains of bromide of ammonia; add one teaspoonful of hot water, steep a few minutes and allow to cool to blood heat, 100° Farenheit, and to this add one to two teaspoonfuls of Hoffman's anodyne, and inject into the rectum, and use a compress to prevent its escape for ten or fifteen minutes. I would also recommend the injecting of one or two grains of ergotine, hypodermically, and administer bromide of potassium as soon as the patient ean swallow, in doses of from one to twenty grains, every two to three hours.

TYPHUS FEVER-SHIP FEVER.

This disease is not commonly met with except in seaport towns or in eamps where soldiers are quartered. and on board ships; its premonitory symptoms are slight headache, loss of appetite and weakness; the cold stage varies in severity and duration; it is said that in rare cases the person attacked never rallies, but dies in the cold or congestive stage. The common result is a reaction and high fever, ranging from 102° to 108° Fahrenheit; after the third day the heat is usually 105° to 106° in the morning and 106° to 107° in the evening, with great muscular debility; the pulse ranges from 110 to 130 and is compressible, delirium, bowels costive and tongue cold, white or yellow; coma-stupor—is common, suppression or retention of urine is not infrequent; hardness of hearing is common in all cases; after a week or ten days the tongue becomes

dark or black and fissured—eracked—and the teeth covered with sordes—black coat. In the second week the body usually becomes covered with a red rash and also sudamina—small watery pimples. The pulse is dicrotus—irregular or has a double stroke—accompanied by subsultus tendinum—twitching of the muscles. The duration of this disease is about three weeks, and the most critical period is about the eleventh or twelfth day. This is a contagious disease.

Treatment.—The treatment must be sustaining from the commencement; open the bowels with (F. 3) or Rochelle salts; a very pleasant cathartie to the taste. also cooling and grateful, is the liquor magnesii citratis -solution of the citrate of magnesia-which should be kept cold and well corked, and given every half hour or hour, giving one-fourth of a tumblerful at a dose. Tineture of aconite root should be given every one or two hours in doses of from one to three drops, whilst the temperature is high, or (F. 25); after the third or fourth day alcoholic stimulants are usually beneficial. and may be indicated from the very commencement, because of asthenia—debility—irregularity and feebleness of the action of the heart, with great muscular prostration. Quinine should be given after the first ten days in from three to ten-grain doses every day, and in malarial localities it may, with propriety, be given from the first. Indeed I consider it an essential. Beef tea, winewhey and egg-nogg should be given at regular intervals in sufficient quantities to sustain, but not enough to burden the stomach. Mineral acids are also beneficial and grateful (F. 39). The body should be sponged every day with whisky and water, the room well ventilated, and the floor kept scrupulously elean.

If the *coma*—stupor—is marked, blister the back and apply mustard plasters to the feet and legs, and turn the patient on the side every day or two to prevent hypostatic pneumonia.

TYPHOID FEVER.

Typhoid fever is more insidious in its approach than any other fever. It commences with lassitude, debility, slight headache, anorexia - want of appetite tenderness of the stomach on pressure, bleeding at the nose, and frequently a slight cough. After several days of indisposition with the above symptoms, the patient takes to bed and the fever manifests itself with considerable violence. The patient is disposed to sleep or doze during the day, with more or less delirium at night, attended with wakefulness. As the disease advances, the abdomen becomes distended with gastympanitis. There is tenderness and gurgling on pressure on the right side, in the vicinity of the ileocacal.valve—junction of the small and large intestine. It is in this locality we have trouble through ulceration of Pever's glands of the ilium—small gut—from which we often have hemorrhage and perforation, resulting in peritonitis—inflammation—of the lining membrane of the abdomen, or collapse and death. The temperature is quite a guide in this disease when understood and properly noticed; the rise is gradual for the first four or five days, never reaching 104° to 105° till the evening of the fourth or fifth day. *Professor Hartshorne says: "An attack of disease in which on the second day the heat in the axilla is as high as 104°, is not typhoid fever; and the same ex-

^{*}Professor of Hygiene and Diseases of Children in the Woman's Medical College of Philadelphia, Pennsylvania.

elusion applies if from the fourth to the eleventh day the temperature falls below 103°." Yet we find many medical men (?) of boastful proclivities, speaking of having numberless eases of typhoid fever patients every season, many of whom were not confined to their rooms or absent from business over a week or ten days. What shall we say of the ability or honesty of such men? Are they ignorant of the symptoms of typhoid, or do they make such false statements to proselyte business from their more honorable brethren by misrepresentations—quackery? Lowering of the temperature at the end of the second week to 103° and below, is considered favorable, but a persistence at 104° to 106° or more indicates great danger. Pneumonia may become a complication of this disease, which, when present, demands the greatest care on the part of the physician and attendants. The question is frequently asked, Is typhoid fever contagious? I answer, that is a disputed point. I believe it to be more or less contagious, and therefore would advise caution, with proper ventilation, and the removal of carpets from the floor. This disease is not common to ehildhood or old age; usually those between fifteen and thirty are attacked, but few ever have it twice. It may be known from bilious remittent—malarial—fever by there being no vomiting, and from typhus fever by the following distinctive points:

IN TYPHUS.

Constipation.

No nose bleed or bronchitis.

No swelling of the belly.

Death often in ten days or less.

Progress moderately slow.

IN TYPHOID.

Diarrhœa.

Nose bleed and bronchitis.

Swelling of the belly.

Death rare before the fourteenth day.

Progress very slow.

The difference in duration of temperature of typhus and typhoid fevers is pointed out as follows: "In

typhus, rarely longer than eighteen days; in typhoid, seldom less than twenty-one days, and often more than thirty. In typhus, also, the evening temperature is not unfrequently lower than that of the morning; in typhoid, the evening temperature is almost constantly higher than that of the morning." Cases ealled "febricula," or "irritative fever" (formerly "synochus"), are described by some writers, says Hartshorne, and met with once in a while in practice, which give a good deal of trouble in diagnosis. Some of these, probably most of them, are mild examples of typhoid fever. Some may be called walking cases; the patient being able to keep out of bed. The average death rate is about one in twenty. The perforation of the ileum-small gut-makes every ease uncertain in the prognosis—decision as to recovery. It is a selflimited disease, and can not be cut short by any treatment.

Treatment.—The treatment consists in the observance of good hygienie measures, and in nourishing and sustaining with beef tea, milk, egg-nogg, milk punch, winewhey, and frequent sponging, to lower the temperature, even to the cold sheet pack. Tineture of aconite root, or the tineture of veratrum viridi, one to two drops in water every two hours; also, liquor ammonia acetatis-spiritus mindereri-may be given every two or three hours, in tablespoonful doses. The bowels should be kept open with Rochelle salts, being eareful not to give enough to eause looseness, which would favor exhaustion and hemorrhage. I am well convinced that the old and pernicious habit of holding the bowels in cheek from six to ten days is a very unsafe course to pursue, and should not be praeticed. For tenderness of the abdomen or tympanitesa swollen or full condition—I would recommend equal parts of turpentine and lard, or pure turpentine sprinkled on a flannel cloth, wring from hot water, and applied over the abdomen, which should be frequently changed. To remove the accumulated gas from the colon, I have found great benefit from injections into the rectum, containing one, two or three ounces of the milk of assafeetida. Most authors have no faith in quinine as a remedial agent in this disease, but I am confident it is an essential in all malarial distriets, and should be used not alone as a tonic, but also to prevent or thwart any depressing influence that malarial poison may produce. I believe there is much greater danger of hemorrhage in malarial districts, due to the greater torpidity or congested condition of the liver (which is common in all malarial localities), resulting in a stasis of the venous circulation; an engorgement of the venous blood by being unable to return from the mesentary through the liver as rapidly as it is sent to the mesentary circulation through the arteries. It will be seen at a glance that in such a passive form of congestion, the vessels, implicated by the ulceration of Peyer's patches, may yield to the undue pressure and distension, and result in hemorrhage, which might have been avoided if the proper precaution had been observed, of guarding the patient's liver against greater torpor or engorgement, by the judicious use of hepatics, and the free use of quinine, which I am bold to assert is indicated in all cases to a greater or less extent. Prof. Liebermeister, of Tuburgin, in Ziemssen, vol. I, p. 213, says: "Quinine has often been recommended as a specific in this disease, but has soon been found ineffective and again been dropped. It was first applied

as an antipyretic in typhoid fever, and used in proper doses, by W. Vogt and afterwards by A. Waehsmuth. I myself have used it as an antipyretic since 1858, but I never dared to use as large doses as are necessary for a powerful antipyretic effect, until after the communications of Vogt. Since then I have hardly treated a severe case of the fever without quinine. To adults I usually give from twenty-two to forty-five grains of the sulphate or the muriate of quinia. (I find the aetion of the two salts in equal doses to be alike.) This dose must positively be taken within the space of half an hour, or, at the most, an hour."

Diarrhea must be corrected by the use of astringents. A tea composed of hamamelis virginica—witchhazel, and myrica cerifera—bayberry—of each one teaspoonful to a pint of boiling water; sweeten and drink warm. The tea may also be used by injection, and retained as long as possible. The fluid extracts of the above agents may be used by giving from ten to thirty drops of each in water every one, two or three hours, or one grain of opium and the one-fourth of a grain of sugar of lead may be given in a pill every three hours, for three or four doses or (F. 1). The same may be given in hemorrhage.

ERYSIPELAS.

This disease, frequently called St. Anthony's fire, and by the Germans, rose, is an acute fever, often attended with a red or scalded appearance of the skin, and frequently blisters, presenting the appearance of a burn from boiling water. The *phlegmonous*—deep—inflammation is attended with swelling, but no blisters or little inflammation of the skin. When this disease attacks the face or head the patient is often delirious for a day or more.

Treatment.—The treatment should be energetic to arrest the inflammation as rapidly as possible, and espeeially to prevent its involving any great amount of tissue. Twenty to thirty grains of quinine may be given every twenty-four hours, in five-grain doses, and thirty or forty drops of tineture of iron every day, given in broken doses. For delirium, give ten to twenty grains of bromide of potassium every two or three hours in water, or the clixir in teaspoonful doses. The bowels should be kept open with Rochelle salts, or (F. 3), or the following (F. 14), may be given. Loeally, I would advise the use of equal parts of tineture of iron and iodine mixed and applied to the diseased part three times each day with a feather or camel's hair brush, and then cover the part with a poultice of cranberries or flaxseed. Give the patient lemonade to drink; if the kidneys do not act freely give a small teaspoonful of spiritus ætheris nitrosi—sweet spirits of nitre-every two or three hours, or a tablespoonful of potassii bitartras—cream of tartar—may be put in a glassful of cold water and drank during the day. This will aet slightly upon the bowels and kidneys. Attention to hygienie measures and nourishment are also enjoined; gruel and beef tea given at regular intervals are as important as medicines.

CHOLERA.

There is no disease feared so much as cholera. During epidemies its ravages have been appalling. In 1831, Hungary lost one hundred thousand (100,000) inhabitants in five months; in 1832, Paris, France, lost twenty thousand (20,000) souls in two months, from its ravages; and in the same year New York city lost three thousand five hundred and thirteen (3,513)

in all. Pages might be written about its ravages in cities in all parts of the eivilized world, but I do not design to give its history. I will now eall your attention merely to its symptoms, which begin often with diarrhœa, usually painless and watery, some days before its attack; yet the person attacked may have had no diarrhea previously. Its duration is from one or two hours, to one or two days; in tropical elimates cases are reported as having perished within ten minutes from the time attacked. There is usually vomiting, and rice-water discharges from the bowels, with pain and eramping in the limbs, and the body gradually growing cold, and attended with great prostration. If the disease is not cheeked there is loss of voice and pulse, a thin and shrunken skin, difficulty of breathing and the breath cold, suppression of urine, cold sweat, eollapse and death. The average duration before death is about eighteen hours. Recovery takes place in from one to three weeks if they survive.

Treatment.—The treatment has been so varied that but little ean be said of its suecess. I will simply give some formulas to be used in emergencies, whilst waiting for a physician. The following (F. 36), may be given; hypodermic injections of morphine, using from a fourth to half a grain every hour, may be beneficial, as the patient can not throw it out by vomiting. Mustard plasters should be applied along the spine, over the stomach, and also the legs and feet, with the addition of capsicum. Bottles or jugs containing hot water should be put to the feet and along the spine, and the patient be well covered, to favor relaxation and sweating. My old friend, the late Dr. Benjamin Puckett, of Winehester, Indiana, claimed to have aided many to

convalescence by immersing them in a large bath tub, containing water strongly impregnated with wood lye, and having the water as hot as they could bear it. This immersion he kept up until the symptoms were favorable before removing them. In addition, he gave freely of the following: (F. 40). Stimulating treatment seems to be strongly indicated in this disease, with artificial heat and counter-irritants to the spine, and, indeed, to the entire body, and also friction. (F. 55) of Hartshorne is also good. Small pieces of ice should be given frequently to arrest vomiting.

RHEUMATISM.

There is, perhaps, no disease that man is heir to that is so annoying as this malady, from the fact, when it has once entered your house and made your acquaintance, you can not tell how soon it will take its departnre, and when once bowed out how soon it will return, and return it will most assuredly with every favorable opportunity. This disease seldom or never proves fatal, unless the heart becomes involved, as in rheumatic endocarditis, pericarditis or myocarditis—the first being an inflammation of the endocardium—lining membrane —the second being an inflammation of the pericardium membrane which surrounds the heart—and the third, inflammation of the myocardium—muscles of the heart. Those diseases have been treated of in my special lecture on heart disease. Other parts are also liable to suffer, as the bronehii in rhenmatic bronchitis; the membranes of the brain, as in rheumatic meningitis; the bowels and the womb may also suffer. We have, besides, gonorrheal and syphilitie rheumatism, acute inflammatory, acute articular and chronic articular rheumatism. This disease is supposed by some to be

due to *lactic acid* being in excess in the blood. The average duration of the disease under treatment is about three weeks, and yet it may last for months and even years, and eripple the patient for life.

Treatment.—The treatment is so varied and very unsatisfactory that many doubt the utility of getting any benefit from drugs. The late Prof. Samuel Smith, of Columbus, Ohio, has said, in substance, in his lectures to the medical students of Starling College, that where there are so many theories advanced and so many remedies recommended in a given disease, by so many medical gentlemen of reputation and standing, you can safely conclude that but little is known or understood of that disease, either of its pathology or its treatment. A celebrated physician was consulted by Mr. M—, who was suffering with rheumatism. After getting his history from the inception of the attack, the doctor prescribed for him. After he had passed out upon the sidewalk the doctor called him back and requested him to return if the remedy proved beneficial, adding that he himself had been suffering for some years and would be glad to find a remedy which would cure him. Quinine and salicylic acid meet with favor in the hands of many, also salicylate of soda; colchieum is also looked upon with favor, especially in gouty patients; Dover's powders, ealomel and opium, lemon juice, propylamin, veratrum viridi, and tineture of iron have all had their advocates. I have no doubt but that all may have seemingly been beneficial. I would recommend a thorough treatment of (F. 41 or 42). Bathing is of great aid, especially the vapor and Turkish baths; bottles of hot water are also very beneficial, or eorn boiled on the ear and wrapped in flannel cloths and applied along

the legs, arms or body. Complications must be treated according to their characters.

GOUT-ARTHRITIS.

This disorder is constitutional, and no doubt the diathesis—constitutional tendency—to it is often inherited, requiring simply a little indiscretion on the part of the person to develop an attack of gont, which disease has been a curse to his forefathers. The premonitory symptoms present themselves in the shape of flatulence—sour stomach-indigestion, palpitation of the heart, and constipation, inflammation or swelling of the toes or ankles; the wrists are also frequently implicated. These attacks are very painful, and frequently during an attack ehalky—tophaccous—deposits take place in or around the joints involved, resulting in more or less permanent crippling of the patient. The duration of an attack is usually not over a week, often only a day or two. In the chronie form we find the attacks occurring oftener and of longer duration. We may have a metastasis—translation—of gout from the toe or foot to the heart, stomach or bowels. When such oceurs there is great danger to life, and relief must be given at onee. The urine is seanty and deficient in uric acid, but containing a normal amount of urea; the perspiration frequently manifests an excess of urie acid and urate of sodium.

The hereditary form is usually of a neuralgic and wandering character, but frequently of the *podagra*—foot—variety.

Treatment.—The treatment of gout should be commenced as soon as the first symptoms manifest themselves. Wine of colchieum seed should be given in ten to twenty-drop doses every three hours, or the compound syrup of rhubarb is beneficial if given three or four times a day in tablespoonful doses; also (F. 41 or 42) will be found beneficial; steaming the affected parts or hot applications will also be found serviceable. Cold applications should never be used, as there is danger of this disease attacking the heart or stomach. Keep the bowels open with (F. 3), and for severe pain (F. 1) or (F. 43).

SCORBUTIS.

This disease is brought about by living on salt bacon and using no vegetables; exposure, homesickness, and mental anxiety. The symptoms are a spongy condition of the gums, bleeding to the touch.

Treatment.—The treatment consists of the free use of vegetables—lemons and onions; medicines are of little or no benefit. Attention to bathing, and plenty of fresh air and exercise are very essential to recovery.

VARICELLA-CHICKEN-POX.

This disease resembles small-pox; it is, however, much milder, and attended with little or no danger to life. In four or five days after the exposure the eruption makes its appearance in the form of watery vesicles—pimples—which, by the second day, are fully developed into pearl-colored blisters. In two or three days they dry into seabs, and shortly thereafter fall off, leaving few if any pits, and but slight discoloration.

Treatment.—All exposure should be avoided; keep the bowels open with Rochelle salts or (F. 3), and give an infusion of ginger to promote sweating, or from three to five grains of Dover's powder every two, three or four hours. If the fever is high and the patient is suffering much pain, give one or two drops of the tincture of acoust root every one or two hours till free from fever.

TYPHO-MALARIAL FEVER.

This disease was so named during the civil war, but the name has fallen into disrepute, and is now looked upon as a misnomer. I am well satisfied that we have many cases every season, in malarial localities, of a continued type of fever that has marked remissions and even paroxysms, with the typhoid tenderness and gurgling in the vicinity of the ilco-cacal valve, or lower and right side of the abdomen, with delirium, diarrhea, and a swollen condition of the bowels. This type does not properly come under the head of typhoid fever, but must be treated energetically, as you would treat pernicious fever, by giving plenty of quinine and alcoholic stimulants. I could not feel safe in the treatment of such cases without the free administration of quinine, and I am confident that all physicians who pursue the expectant course, as is common by many in typhoid fever, will lose a large per cent. of their cases by death. I would especially urge that such patients be kept constantly under the influence of quinine, giving from five to thirty grains every twentyfour hours, being governed by the urgency of the symptoms. One to four drops of the tineture of aconite root may be given every one, two or three hours; the bowels should be kept open with (F. 3) or Rochelle salts. Beef tea, winewhey, fresh buttermilk, egg-nogg and milk punch should be given every three or four hours. When the pulse is weak and rapid, good brandy, whisky or wine should be given to sustain the heart; also digitalis in doses of from three tofive drops every four hours. The body should be sponged off every day, and alcohol or mustard may be added to the water to stimulate the skin.

YELLOW FEVER.

This disease is one which has baffled the skill of the united medical profession and sent horror and gloom to thousands of southern homes in the United States, as also in all tropical countries. Hundreds of brilliant and noble physicians, members of the priesthood, and of the noble and self-sacrificing Christian sisters of charity, also ministers of the gospel of all denominational faiths, and untold thousands of philanthropists have sacrificed their lives battling against this dread destroyer of humanity.

Symptoms.—It is usually abrupt in its beginning, with an occasional slight chill; the fever is high from the commencement, with no remission for two or three days; nausea and vomiting occur on the second day and are attended with great tenderness of the stomach, violent headache, delirium and a flushed face, and eyes very red. After the second or third day there is a remission of the fever, the skin becomes yellow, the pulse and breathing are more natural. Convalescence may now take place; if not, the third stage brings with it collapse and vomiting of blood, looking like coffee grounds.

Treatment.—The treatment has been so unsatisfaetory that I shall only mention a few remedies: For thirst and vomiting, small pieces of ice may be given every ten or twenty minutes, or iced mineral water or champagne. You may put one-half grain of ipecac in a glassful of cold water and give one teaspoonful every

ten minutes. Fluids of any kind should be given only in teaspoonful doses every ten minutes, half hour or hour, as emergeneies demand. In the collapsed stage wine, brandy and beef tea should be given often, and the patient sponged off once or twice each day with water containing alcohol and mustard. Convalescents need quinine and alcoholic stimulants, such as eggnogg, milk punch, beef tea, winewhey, and nutritious soups, as they gain strength.

RELAPSING FEVER.

This fever resembles bilious remittent fever, but with less abatement and more pain in the limbs. About the fifth or sixth day the patient becomes free of fever abruptly and may get around; a relapse usually occurs in fourteen days from the attack. The patient may then have fever as at first, and it may last from two to ten days; these relapses may occur several times; death is usually sudden.

Treatment.—The treatment should be cooling. You may give a teaspoonful of effervescing citrate of magnesia in water, adding one, two or three drops of tineture of aconite root every one or two hours. If, the kidneys do not act sufficiently, give tineture of digitalis in doses of five to ten drops every three hours; or one-half teaspoonful doses of sweet spirits of nitre may be given every three hours. During the freedom from fever quinine should be given in grain doses every one or two hours. Keep the bowels open with (F. 3) or Rochelle salts. Quinine may be given, when the fever is high, in from three to five-grain doses every three or four hours; to arrest vomiting you can refer to any of the anti-emetic remedies in the back of the

book, or put one grain of ipecae in a glassful of water and give a teaspoonful every ten minutes.

SYPHILIS.

Of all diseases known to man *syphilis* is certainly the one to be most dreaded. Every honorable man should not only avoid it in all its bearings and insidious advances, and should so put a check upon his passions as to be morally certain that it can never pollute his manhood. Syphilitic virus is a blood poison. When it has once entered the blood every tissue of the body is implicated; the seeds of premature decay and death are sown, which will not stop with the death of its guilty victim, but will be transmitted as an acursed heritage to his posterity.

Still worse, the unfortunate wife, who, in her innocence and purity, pledged herself to become his victim through life, must also suffer for the sins of his commitment.

"A man with syphilitic antecedents who contracts marriage, may become dangerous to his wife in two ways: 1st. By directly transmissible contagious lesions, which may happen to him after marriage; 2d. Indirectly through his fecundating power: that is, by the procreation of an infant, the infection of which may be reflected upon the mother."

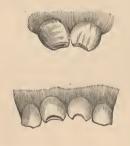
I have just quoted from a lecture delivered by Alfred Fournier, at the St. Louis Hospital, Paris, France, entitled, "Syphilis by Conception," which shows the views and observations of the learned professor and author. I will again quote from the same lecture:

"There is a woman who, on the one hand, has syphilis, without having presented an initial lesion, and who,

on the other hand, has been infected by her husband, without the husband presenting any contagious lesion. But, then, what is the mystery? What, then, is this mystery? Well, gentlemen, here is the key: That the woman became syphilitic in this manner, without initial lesion, without chancre, and become syphilitic from the contact of a husband, exempt since his marriage from every contagious lesion—that woman is enceinte, and she has received the syphilis by conception."

After what you have read on the effects of syphilis on the child and also the mother, from such undoubted authority as Fournier, you can scarcely question the impropriety of the marriage of such persons. It is known to be a fact by all physicians, that the children procreated by syphilized fathers are seldom carried by their mothers the full period of nine months; when females abort every time they are impregnated, it may be well to remember that it may be due to the syphilization of the husband, and no fault of the female thus aborting. Syphilis being the result of the social evil, or curse, it becomes the duty of every father and mother to study how to bring about such a state of morals as to protect their sons from the greatest of curses known to man. In its presence the baneful effects of the excessive use of alcohol falls into insignificance; the low groggery, or dram-shop, with all its orgics and midnight brawls, is nothing compared with the gilded palaces of sin, with their fascinating and abandoned women, and sparkling champagne or catawba, dealing out to the young and old, the aristocratic and wealthy of our land, a poison, which permeates every tissue, and in its secondary stage causes copper-colored cruptions of the skin—cezema syphilitica—also seales and ulcers, and in its third stages attacks the bones and rots them, producing untold agony and rheumatic pains at night, the sufferers becoming loathsome to their friends and even a burden to themselves. This blood poison is entering into the families of the highest as well as the lowest of the human race, and, if not arrested, may become a national calamity, as it is now a curse.

There are two modes of attack, the chancre and chancroid. The first being called the Hunterian chancre, the second the soft chancre. The Hunterian chancre may commence with a small uleer, almost imperceptible, with a hard base and cupped in the center,



SYPHILITIC TEETH.

and presenting a steel-gray appearance. This form is the infections kind. The soft chancre is elevated, red, and bleeds easily. It frequently sloughs—eats away the tissues—and is thought not to be infecting by many, whilst others maintain that the constitution may also become affected from it. The only assurance man has

is to avoid all chances of contracting either. Girls, avoid marrying men suffering from constitutional syphilis, if you find such to be the fact. Those of you, young men, who have constitutional syphilis should not marry and poison the blood of your wives and bring into the world sickly children, who in turn must suffer for your own sinning, and even show to the world, the sins of the father by their deformed teeth.

Treatment.—The treatment should be energetic from the commencement. For the primary and secondary

treatment, mercury stands at the head. It may be given in various ways; the system should be brought under its influence as rapidly as possible. Five grains of blue mass may be given three times a day or two grains of calomel may be given every six hours, or the patient may take the one-sixteenth $(\frac{1}{16})$ of a grain of corrosive sublimate every six hours; either may be given in doses as directed (avoiding the use of acids) and continue the use of some form of mercury for a week or ten days, or till the gnms look pale, spongy or doughy, then its use should be discontinued for a few days and resumed again. The skin should be kept clean by the use of warm baths; a proper amount of rest should be taken, and alcoholie stimulants discontinued if used. Locally, a wash composed of sixty grains of tannic acid, ten grains of morphine, one ounce of extract hydrastis, and sufficient rainwater to make six ounces, may be used several times a day, bathing the chancres but not rubbing them; and absorbent cotton should be covered over the chancres after each cleansing. It is a safe plan to burn or cauterize the chancres with caustie, potash or acid nitrate of mercury if taken early. When using the acid nitrate of mercury it should be neutralized right after burning the chanere, with the biearbonate of soda. Iodoform sprinkled on the chancre once or twice a day is an excellent local application. A salve may also be applied every six hours, composed of earbolic acid, pure, one drachm, eitrine ointment two drachms, and oxide of zine ointment sufficient to make two ounces. The compound elixir of corydalis is an excellent vegetable alterative and may be given in teaspoonful or tablespoonful doses three times a day whilst the mercury is being given; or give (F. 44). In the third stage

iodide of potassium is the remedy, but to be of benefit it must be given in large doses, from ten to sixty grains every day. In conclusion, I will say, avoid this destructive disease, but if you will become lower than animals through vice and infection, apply to a good physician and let not a moment escape till you are under proper treatment.

GONORRHEA-SPECIFIC URETHRITIS.

This is an inflammation of the urethra in the male and of the urethra and vagina in the female, due to a specific *virus* or poison.

Its symptoms are soreness, redness, pain and swelling, with a burning pain on passing water and a discharge of matter; with the male, chordee or painful erections. Walking, cohabiting or drinking alcoholic stimulants greatly increases the pain.

Inflammation of the urethra may be brought on by contact with the leucorrheal or menstrual discharge. Such cases occur and have been the source of serious troubles in families, by men accusing their wives—who were innocent—of infidelity. Physicians and husbands should be careful, lest happy homes be blasted and innocent women's hearts broken, through hasty conclusions being formed as to the real cause of such maladies. I warn all men to be eautions as to how they pierce the hearts of their wives by such unjust suspicions or accusations. This disease may manifest itself in from twenty-four hours to nine or ten days, and its duration is from one to three weeks. A chronic inflammation may follow, giving rise to a discharge commonly ealled gleet, which may also result from ulcers in the track of the urethra. These, upon healing, contract or narrow the channel at given points,

resulting in stricture. When such occurs there is an inflammation just back of the stricture, and it constantly exerctes a watery fluid, of a slightly purulent—mattery—character, and often result in spermatorrhæa and impotency. Such eases cannot be cured without the aid of a surgeon. Rheumatism may follow gonorrhæa, and may be due to some specific influence that the poison exerts upon the system. Bubo—inflammation of the inquinal glands—glands of the groin—may attend gonorrhæa, and also orchitis—inflammation of the testicle—or epididymitis—inflammation of the sack surrounding the testicle.

Treatment.—The treatment should consist of rest, the free use of flaxseed tea internally, and bathing the parts freely and often with lukewarm water and perfect quiet. As soon as the acute inflammation has subsided, injections may be used. Nitrate of silver, one to ten grains, in four ounces of water; another is, sulphate of zinc, ten grains; sulphate of morphine, twenty grains; water, four ounces; and still another, sugar of lead, five grains; carbolic acid, ten grains; glycerine, one ounce; water, three ounces. Either of the above solutions may be used by injection every three hours.

Internally.—Give twenty to thirty drops of the fluid extract of buchu every three hours, or the same dose of uva ursi or (F. 45). Open the bowels with Rochelle salts or (F. 3), and avoid alcoholic stimulants. For chordee give (F. 51). Females need much stronger treatment locally than males, and must pay marked attention to the cleansing of the vagina with warm water every two or three hours, with the household fountain syringe, indispensable cup syringe, or Cham-

berlin's utero-vaginal syringe. Put half a teaspoonful of sulphate of zine in a quart of warm rainwater, or a strong infusion of green tea, and use with the douche every three to six hours, washing out all aecumulations. The greater cleanliness observed by females the more rapid will be their recovery.

SPERMATORRHŒA.

This means the seminal fluid, and as applied in disease means a more or less continual escape of semen, which breaks down the nervous system, causing dyspepsia, impotency, pain and weakness in the back, spots before the eyes, melaneholy and often terminating in fits. The cause may be due to stricture, resulting from self-abuse, or vice; it may also be due to injuries, or exhaustion following greatmental or physical labor, and from excessive venery. When such a condition is present, or an individual suspicions such to be the ease, they should apply to a good physician at once who can detect it, if present, by the aid of the microseope, and which, if due to stricture, may be easily deteeted by the introduction of Otis' bougie. When not due to stricture, constitutional treatment may be of benefit; when due to stricture, it will require the attention of a good physician. See (F. 56), also therapentics on the disease.

ANGEIOLEUCITIS.

This malady is an inflammation of a lymphatic vessel. It may follow a bee-sting, the bite of an animal, or a wound of any kind. It may be best distinguished from crysipelas, which it frequently accompanies, by an elevation or red line along the limb or part implicated, with tenderness throughout.

Treatment.—Cooling lotions, as lead wash and cool water frequently applied, or the application of iodine, followed with cold poultices of flaxseed meal, changing as often as they become warm, are also very beneficial. Tonics and stimulants are often in demand (F. 12). It often assumes a typhoid type of fever, when due to poisoned wounds, or from the dissecting knife, or from the butcher knife. Opiates are needed to relieve pain. One-fourth of a grain of morphine may be given every two or three hours.

THROMBOSIS AND EMBOLISM.

These are simply a plugging up of the arteries and veins from febrinous clots; thrombosis being a plugging up of a vein, resulting from *phlebitis*—inflammation of a vein. Embolism is plugging up of an artery by a fibrinous clot, which may result from crysipelas, syphilis, intemperance, injury or heart disease.

The Symptoms are mortification, headache, tinnitus aurium—ringing in the ears—dilatation of the pupils of the eyes, and stupor.

Treatment.—The treatment is mainly hygienic, fresh air, rest, stimulants in moderation, and soothe with nervines and opiates, or (F. 43). The food should be nourishing and easily digested, and complete freedom from excitement. Amputation may often be necessary.

PYEMIA.

This is blood poisoning by *pus*—matter—being carried into the general circulation through the veins from wounds or by a retained placenta, after regular delivery or abortion, and occasionally following surgical operations. Cases are reported where no assign-

able cause could be given, there being no wounds or other causes just enumerated.

The Symptoms are prostration, feebleness of the pulse and very rapid, chills, low fever, delirium, pains in various parts of the body, and swelling of the joints. Death usually occurs in a few days, from exhaustion and devitalization of the blood.

Treatment.—The treatment should be antiseptic; carbolic acid given in grain doses every three or six hours, also the hypophosphites of lime, soda and magnesium may be given. (F. 47.) The bowels should be kept open with (F. 3) or Rochelle salts. Quinine is also beneficial, (F. 23). Alcoholic stimulants are essential; also egg-nogg, milk punch and winewhey.

MELASMA SUPRA-RENALIS-ADDISON'S DISEASE.

A disease of the supra-renal capsules of the kidneys, presenting for its symptoms a bronzed appearance of the skin, with great anemia—loss of strength—palpitation of the heart, dimness of vision, dyspnea—difficulty of breathing—and frequent vomiting.

Treatment.—Treatment is of no great benefit. Tonics, cod liver oil, regularity of habits, both of bathing and eating, are about all we know of at this time. Future discoveries may reveal to us a curative mode of treatment.

ANÆMIA.

A deficiency of the red corpuscles of the blood, with debility and a pale appearance, is what is termed anæmia. The causes are various, as protracted fevers, injury and hemorrhage, or hemorrhage resulting from any cause; diarrhea, leucorrhea, nursing a child too long, unwholesome and a scanty amount of food, impure air and malarial poisoning.

Symptoms.—Palpitation of the heart, pallor, easily fatigued, very excitable, heart murmurs and often *syncopal*—faint.

Treatment.—Good nourishing food, regular sleep and plenty of it; keep the skin clean by bathing at least twice a week, or oftener in hot weather; avoid excitement or hard mental or physical labor, and use the following medicines, if agreeable to the stomach: Dialyzed iron may be given three times a day in five to ten-drop doses; tineture of iron in ten-drop doses in water three times a day; cod liver oil or the emulsion with the hypophosphites should be given three times a day, plain or in whisky; quinine must be given in ague districts.

LEUCOCYTHEMIA.

This is an increase of the white corpuseles of the blood and a diminution in amount of red corpuseles, with enlarged spleen and liver and a dropsical condition of the abdomen, often attended with vomiting, diarrhæa and bleeding from the gums. It may result from low fevers, cold and exposure.

Treatment.—The treatment is as yet unsatisfactory, no cures ever having resulted under any course of treatment. Life may be prolonged by the use of tonies, such as iron, einchonia, quinine, and wholesome food with good hygienic regulations, fresh air, regular bathing and plenty of sleep.

GOITRE BRONCHOCELE.

Enlargement—hypertrophy of the thyroid gland of

the neck—is frequently met with in this country in a mild form, slight enlargement. It seems to be common in some parts of the world, and has assumed an epidemic form, at times, in the valleys of the Pyrcnees, Alps and Apennines. It is more common in the mountainous or hilly portions of the eastern and middle States. It is not common in the southern States. It is quite common in England, in Surry, Norfolk and Derbyshire, and it is often called Derbyshire neck.

Treatment.—The treatment should be to remove the cause by changing climate, good hygienic regulations, and the use of tineture of idodine locally. Injection of the tineture of iodine into the tumor has also been practiced successfully by Luccke, of Berne, and other renowned surgeons. It has been removed by excission by Hedmus, of Dresden, and Desault, who was the first to attempt it.

SKIN DISEASES.

There are so many forms of skin disease, and they are so very difficult to define, that those not making them a specialty, are frequently puzzled to make a diagnosis—distinction—of the many forms. The following embraces the classification as commonly used by the profession: Eczema, herpes, crusta lacea, scabies, pemphigus, rupia, pustulæ, tubercula and its following types, viz: Acne, molluseum, lupus, clephantiasis, graecorum, frambæsia and keloid. I will not weary you with more; suffice it to say it is much the best to apply to a physician when those skin diseases make their appearance.

Treatment.—This depends upon the character of the eruptive disease, and I shall only attempt to give you a few hints. Bathing is an essential, prudence of diet, and an avoidance of stimulating drinks. For scabies—itch—use (F. 54) and bathe regularly every night and change under-clothing often. Acne—grubs in the face—may be removed with (F. 10) applied locally, and by using (F. 30) internally. (See treatment of various skin diseases in chapter on Therapeutics, in the back of the book.)

CARBUNCLE-ANTHRAX.

This disease is an inflammation of the cellular tissue, of a low grade, and often involves a large amount of the tissue. It never attacks persons in robust health, but those whose systems have let down are the subjects of attack. It presents an indurated, reddish blue appearance and is doughy to the touch. Its progress is slow; after several days it begins to point in several places, showing small yellow elevations, which, when opened, discharge a tough yellowish matter.

Treatment.—This disease being of the asthenic—low—type, it is, therefore, of much importance to stimulate, tone and sustain the system from the very commencement. Tineture of chloride of iron should be given every three hours in sufficient water, quinine in tonic or grain doses three times a day; if, however, it is in a malarial locality quinine must then be given in larger doses, using from ten to thirty grains each day. Anodynes to relieve pain (F. 43), or one-fourth grain of morphine every three hours, and the bowels kept regular with (F. 3) or Rochelle salts. When the patient is too weak to eat, give beef tea, egg-nogg, winewhey, milk punch, and, as a cooling drink, lemonade. Local treatment is also of importance; a free crucial

incision has been the leading practice for some years. I think, however, that it is much better to inject iodine or carbolic acid into the carbuncle at different points. The iodine may be used full strength, but the carbolic acid must be diluted about half or two-thirds and then inject; then in a few days you can lance. Poultices should be used from the commencement. It often proves fatal, especially when about the face or neck.

RACHITIS.

Rickets is a disease which manifests itself by a lack of earthy matter in the bones, which permits them to bend, and is attended with great muscular debility. It seems to result from defective nutrition.

Treatment.—The treatment is mainly hygienie; good food, bathing, pure air, and cod liver oil. Dialyzed iron may be given in doses of from two to ten drops three times a day, and also hypophosphites of lime and soda, (F. 47).

ONYXIS.

Ingrowing nail is common, especially to the great toes. The only radical cure is slitting and removing a portion of the nail, after which it may be dressed with lead or zinc salve. Corns and bunions may be removed with (F. 11) if the remedy is used regularly.

SCROFULA.

This is a strumous or tuberculous diathesis, which manifests itself frequently by enlargements and inflammations of the lymphatic glands of the neek and armpits; the eyes may suffer as well. It may be hereditary, the result of poor living, unwholesome diet, living in damp houses, or by too many sleeping in one room. It may also be due to a syphilitic taint.

Treatment.—Tonics and alteratives, fresh air and good nutritious food, with frequent bathing, are essentials; temperance in eating and drinking are very important observances. Cod liver oil should be given three times daily; the compound clixir of corydalis will be found of benefit if given three times a day in teaspoonful doses to adults, and to children in proportion to the age. Local treatment is of but little benefit. (F. 46) may be given with good results, and iodine ointment applied locally once a day.

PARONYCHIA-FELON.

This when superficial is what is usually termed "run round,"—an inflammation around the root of a nail—and is often so severe as to cause the nail to drop off. When deep seated it attacks the *periosteum*—covering of the bone—and will terminate in periostitis and death of the bone if not properly treated.

Treatment.—At the very commencement a fly-blister may arrest the inflammation, or a part of it. If, however, it be deep-seated and the covering of the periosteum—bone—is involved, then early incision down to the bone is important. If the blister does not arrest it, poultices may then be applied with benefit. Anodynes should be given internally to relieve pain (F. 43), and quinine, in ague districts, to prevent chills, which frequently follow such a difficulty.

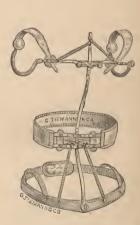
ORTHOPÆDIC SURGERY.

POTT'S DISEASE-ANGULAR CHRVATHRE.

The backward projection of the spine at some given point, resulting in what is commonly known as hunchback, is a disease of the vertebræ—bones of the spine—







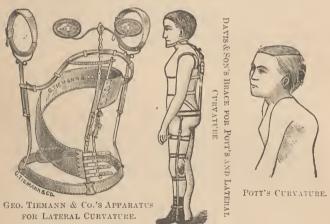
GEO. TIEMANN & Co.'s APPARATUS FOR POTT'S CUR-VATURE.

two or more being usually involved. Caries, or rotting of the body or anterior portion of the vertebræ, causes the head and shoulders to drop forward. It is a strumous—scrofulous—disease. When the disease has progressed to any considerable extent without being arrested, abseesses of the back occur, discharging pus-matter-either in the vicinity of the disease or in the groin, bowels, lungs, or vagina.

Treatment.—The treatment is the same as in rickets; fresh air, wholesome food, bathing regular, and occasionally in salt water. Iron, cod liver oil and quinine should be given occasionally; especially should quinine be given in malarial localities. The diseased vertebræ must be lifted apart if we expect to arrest their decay, which can be done by a properly constructed spinal apparatus as the above, or plaster of paris jacket. I have seen several cases recover under this treatment.

LATERAL CURVATURE.

Lateral curvature is usually due to weakness or habit, and is seldom a diseased state of the vertebræ—



spinal bones. Appliances are often beneficial; with good food, fresh air and (F. 46) will aid nature.

MORBUS COXARIUS.

Hip-joint disease is another form of the *strumous*—scrofulous—diathesis. The head of the *femur*—shank-bone—becomes *necrosed*—diseased,—and also the *ace-tabulum*—socket—in which the head of the shank ro-

tates. Constitutional tendencies to bone disease exist in all such subjects, and develop at any favorable opportunity, as from exposure, a fall, a blow or, perhaps, a wrench.

Treatment.—The constitution must be built up with tonies and alteratives taken the same as in the foregoing diseases. The bone must be lifted away from the



DAVIS & SON'S BRACE FOR HIP-JOINT DISEASE AND PARALY-SIS.

socket by a surgical appliance; Prof. Saver's is eonsidered by many the best in use. Although there are many others, perhaps, quite as good made by the manufacturers named, any good physician can take the measurement for appliances as directed by those manufacturers and have good instruments made and shipped to their patients' homes often at less expense than to make a trip to a surgical (?) institution. The following course of treatment will be found beneficial: (F. 46) may be given with ad-

vantage. Quinine in malarial localities is important; tincture of iron is also beneficial in ten-drop doses three times a day.

TORTICOLLIS-WRY NECK.

This deformity is due to a contraction of the cervical muscles of either the right or left side of the neck, especially the sterno-cleido-mastoid muscle, or paralysis of the muscles of the right or left side of the neck. It is said to be more frequent in the female than the male. It may also be due to disease of the cervical vertebræ—bones of the neek.

The Treatment consists in tonics and and alteratives, with a properly constructed surgical appliance, which

is essential in all eases. Bitter wine of iron may be given in teaspoonful doses every two to six hours, or (F. 46), with due attention to regulating the bowels with (F. 3) or Rochelle salts; or for obstinate constipation, the extract of easeara sagrado (Parke, Davis



& Co.) may be given in from one-half to one teaspoonful doses, once every day, or oftener if necessary. Proper attention to hygiene is also an essential

BOWED LEGS.

This deformity can easily be corrected by the application of a mechanical appliance, as shown in the cut.

Parents should not permit a child to grow up with any deformity that is so easily corrected, or, in fact, that can be corrected by appliances, even though it may require years to correct it.

This cut shows

GEORGE TIEMANN & Co.'s

BRACE FOR BOWED LEGS, APPLIED.



ANCHYLOSIS OF THE KNEE OR ELBOW.

Stiff knee or elbow and crookedness may be overcome, in many instances, by first etherizing or chloroforming the patient and then thoroughly breaking up all adhesions, and applying a properly constructed brace, as shown by the cuts, kindly furnished by Mr. R. C. Davis & Son, manufacturers of all styles of braces for



R. C. DAVIS & SON'S STIFF KNEE AND HIP JOINT APPLIANCE.



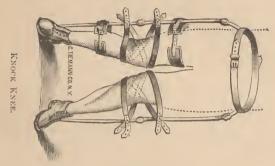
Davis & Son's Appliance For Stiff Elbow.

deformities, 29 North Illinois St., Indianapolis, Indiana. There are many places in the United States where deformed or crippled persons may get surgical appliances at reasonable figures, and not be humbugged into paying exhorbitant prices for poorly constructed

and improperly fitting instruments. I take pleasure in recommending George Tiemann & Co., 67 Chatham street, New York, and the Orthopædic Hospital at Philadelphia, presided over by able surgeons, and D. W. Kolbe' & Son, as machinists. I warn all my readers against traveling quacks. Apply to good surgeons or physicians, and have your measure taken, and braces constructed by reliable manufacturers, as the manufacturers mentioned.

KNOCK KNEE.

This is a disgusting deformity, and an inconvenience to the sufferer. It is also amenable to treatment; but the appliances should be resorted to whilst the child is young. The cut illustrates the mode of applying braces for its correction.

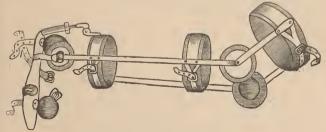


CLUB FOOT.

The different forms of club foot can all be corrected



by the use of the proper appliances, but the treatment should be resorted to whilst the patient is quite young.



APPARATUS FOR CORRECTING CLUB FOOT.

No medical treatment is necessary, as it is simply a deformity. It is sometimes necessary to cut some of the tendons, but as a rule it is a bad practice.

WOUNDS.

We have incised, lacerated, contused, punetured, gunshot, poisoned and penetrating wounds. They may also be superficial or deep, recent or old, simple or complicated, oblique, transverse or longitudinal.

The incised wound is one caused by a sharp instrument; a lacerated or contused wound is made with a blunt instrument; punctured, when the weapon is narrow and pointed. A gun-shot wound is, of course, one inflicted by a ball; a poisoned wound, is one inflicted by a rabid—mad—dog, a poisonous snake, lizzard, a bee sting, the bite of a fly that has been feasting on a carcass, or a cut with a dissecting or butcher's knife; a complicated wound, is where an artery is injured, attended with hemorrhage, or a fracture of a bone, as in compound comminuted fracture, the presence of foreign matter, crysipelas, abscess, mortification, pyæmia and tetanus.

Treatment.—The mode of dressing wounds depends upon their character, extent and location. An ineised wound should be cleansed and hemorrhage arrested by ligating—tying—any artery that may be cut, and bringing the wound together and holding it by interrupted sutures—stitches—or adhesive—sticking—plaster. If a vessel is wounded and bleeding profusely, a compress should be used until a surgeon can be obtained. Take a large cork and cover it with a cloth and bind firmly over the wound, or if a cork can not be had, puff balls may be broken open and bound over the wound, applying over the puff ball a roller of muslin; either one must be bound on with considerable pressure. Scalp wounds should not be brought together too closely,

either by adhesive plaster or sutures; space must be left for drainage, or there will be burrowing of pus—matter. Contused, lacerated and gun-shot wounds are usually dressed with cooling, soothing and healing lotions, as (F. 57-65). Where there is much inflammation, cool water dressings, in addition to the medicated lotion above referred to, is essential. When suppuration supervenes, earbolic and oxide of zine salve make excellent dressings. Astringent washes are good when there is proud flesh—weak granulations. Cauterizing—burning—with lunar eaustic, is often necessary where the granulations grow above the skin. Sulphate of copper—blue stone—and aluminum exsiccatum—burnt alum—and many lotions, infusions or salves might be mentioned.

FRACTURES AND DISLOCATIONS.

Fractures and dislocations need only passing mention, as all such cases should be placed in the hands of a good surgeon immediately after the injury is sustained. Fractures, especially, require close attention by a competent surgeon, to avoid deformity as much as possible. Deformities are frequently produced by meddlesome friends or neighbors, by loosening the bandages. Never loosen a bandage, but if it appears necessary to loosen it, send at once for your physician, as he alone should loosen or tighten it, as may be necessary. Many physicians are sued for malpractice, when the patient or friends are at fault. When my patients are meddled with, or interfere with the bandages, I relinquish all responsibility.

ULCERS.

An uleer is an abrasion of the skin, with more or less sloughing of the tissues, and a discharge of pus—matter—or an ichorous—thin, irritating—discharge. Sir Astley Cooper divides uleers into healthy, languid, inflamed, gangrenous, irritable, sinuous, menstrual, varicose, ungual and cutaneous. All the different forms of uleers require specific treatment.

Treatment.—The treatment of acute ulcers requires soothing and anodyne treatment (F. 57 or 58), the indolent ulcers, causties and stimulating salves, or liquid applications (F. 59, 60, 61), and many need elastic stockings, if situated upon the feet or legs. Constitutional treatment is also important, as the clixir corydalis compound, or (F. 46). I have also found (F. 62) to be very beneficial for indolent ulcers situated upon the shin or ankles. If there is syphilitic taint give (F. 44) internally, and apply (F. 63) locally three times a day. Good diet, regularity of bathing and an avoidance of all alcoholic stimulants are very essential.

CANCER.

This disease is one of the most distressing, and often the most disgusting to the sufferer and friends, of any man is heir to. There is, perhaps, no disease that enriches the poekets of unscrupulous quacks and impostors as does this one. After the poor sufferers are pronounced ineurable by their regular family physicians, and by all well educated and honorable physicians whom they may have consulted, they then seek as a refuge—what a refuge!—in the haunts of those human vultures, who, like buzzards, feast on the hardcarned pennies of their confiding victims. These un-

eonseionable quacks and swindlers-whom the law does not reach in many states, and our legislators wink at the while and say, "Let the people judge for themselves," when honorable and regular physicians attempt to legislate against them-are yearly extorting thousands of dollars from these incurable vietims of cancer, by the positive assurance of their ability to eure them, when all honorable physicians have prononneed them incurable. As well place two baskets of berries before hungry children, the one containing the wholesome whortleberry, and the other the like tempting (in appearance) belladouna, as to say, "Let the people judge for themselves" of a profession they ean not understand, and as a rule judge simply by the personal appearance of the men, the style they display and their oily tongues and printers' ink. Many fatty and non-malignant tumors are mistaken for eaneers, many of which are removed by these ignorant pretenders by the use of causties. Their successes are brought about through mistaken diagnoses of the family physician, or an assnrance of its innocence or nonmalignant character, and builds for them reputations by which they enrich themselves from the pockets of those unfortunate, incurable victims. These pirates have large signs posted on the outer walls of their dens, reading, "Cancers removed without the use of the knife," simply because they dare not attempt to use the knife, which is due to their ignorance of the anatomy of the parts, and to eater to the fancies of these sufferers, who have a horror of surgical operations. I do not believe there is a man in America who advertises to cure caneers without the use of the knife that has any knowledge of surgery or anatomy, or has ever attended a medical college or dissected a body—the only means

by which a man can become an anatomist and surgeon—and thereby become qualified to use the *knife* and avoid arteries or nerves, or ligate arteries when necessary.

Professor Samuel D. Gross, says, vol. 2, pages 924-925: "But, although an operation may not often materially prolong life, may, perhaps, sometimes even do harm in hurrying on the fatal issue, there are, nevertheless, in my judgment, valid reasons for its occasional performance. No one can doubt that in cases strictly exceptional, such, for example, as those previously alluded to, extirpation may be followed by the happiest results, not only ridding the part of pain, but enabling the patient to live in entire comfort for many years."

"Finally, I am not an advocate for removing eancerous breasts with *eaustics*. Independently of the cruel pain which attends and follows their application there are few cases in which, unless the disease is exceedingly limited, they do not leave more or less of the morbid structures intact, and, consequently, in a condition for speedy outgrowth. The knife is always a more certain remedy, and, in these days of anæsthetics, there is no valid reason why it should ever give way to escharotics."

Dr. Monro, of Edinburgh, Gross' Snrgery, page 923: "On the other hand, Dr. Monro, of Edinburgh, in 1742, asserted that he had witnessed nearly sixty eases of excision of cancer of the breast, and of these only three remained free from the disease at the end of two years. Dr. John Macfarlane, in 1838, published the results of thirty-two cases that had occurred in his own practice, in not one of which the cure was permanent."

Professor Samuel W. Gross believes that cancer is

usually local at the commencement; and believes if the entire breast and pectoral muscles are removed down to the eartilages sufficiently early, the patient may entirely recover. He recommends repeated amputations as often as the disease reappears, asserting that it will prolong life, when perfect immunity is not achieved.

My friend J. A. Comingor, M. D., Professor of Surgery in the Indiana Medical College, believes cancer to be often local at the commencement, and sustains S. W. Gross' opinion that early, liberal and repeated operations will often permanently relieve the sufferer, and invariably prolong life, if the operation is performed before the system has become too much involved. believe that, as a rule, if any suspicious tumor that presents itself were removed at once, many cases of caneer would never reappear, and am assured if eaneer of the lip-epithelioma-is properly removed, it seldom returns. In all the eases I have operated upon there is no return of the disease. The worst case of epithelial cancer I ever removed was from Mr. John A. Handkammer, residing near Alma, Wabanusee county, Kansas, who is now seemingly in perfect health.

It is, perhaps, a safe course to have suspicious tumors removed as often as they appear, but invariably with the knife, and not torture the patient with causties. I will give you a few of the many caustic remedies and their combinations that are used by those charlatans who claim to have made some wonderful discoveries, all of which they have purloined from the regular works on Materia Medica and Therapeuties, either directly or indirectly, and then claim them as discoveries of their own, or that of some medicine man of some tribe of the red men of the forest. (Just whilst penning this I am being annoyed by a patent corn remedy vender, who

has the check to offer a combination of salicylic acid, collodion and extract of cannabis indica as a discovery of his own, which was first recommended by a German physician.) This man asserts that medical education and books are of no account, and that most of the medical works written by our able physicians and investigators are worse than useless, adding that he preferred n-a-t-c-r-a-l d-o-c-t-o-r-s t-o t-h-e c-o-l-l-c-g-e c-d-c-c-a-t-c-d u-n-s. Thus you see the Biblical injunction of the "blind leading the blind" practiced every day and falling into the ditch together. (See Remedies in Therapeuties on Cancer).

HERNIA-RUPTURE.

This difficulty often destroys life by strangulation of the gut. For a number of years the operations for cure have been dangerous, and usually attended by failure. I am well persuaded, however, by my experience in operations by Heaton's method of injections, that a very large per cent. of cases can be cured, if operated upon properly, and that, too, without danger to life. Woods' method is also a good one, but attended with some little danger of inflammation. Persons having hernia should not despair, but apply to a good physician, and try Heaton's or Woods' method, and have a radical cure performed.

FORMULARY.

THE following formulas of the author, and of many of the leading physicians of the world, are the ones referred to throughout the book on the treatment of disease.

The doses of the remedies which are recommended in this work are intended for adults, and therefore in giving them to children, the doses will have to be reduced in proportion to age. I will give two rules:

Young's method is very easily remembered. It is to add 12 to the age, and divide the age by the result. This is simple and sufficiently accurate. Example for $2 \text{ years} - \frac{1}{24} \hat{r}_{12} = \frac{1}{7}$.

Dr. R. O. Cowling has given a very good rule. According to this, the dose for a child is obtained by dividing the number of the following birthday by 24. For example, at 2 years— $\frac{3}{2}$ = $\frac{1}{8}$.

The above rules do not apply to narcoties, as Opium, Morphine. Chloral Hydrate, Hyoscyamus, Belladonna, Conium, Stramonium, or Digitalis. I have seen the one-two-hundredth $(\frac{1}{200})$ part of a grain of morphine produce slight nareotic effects when administered every hour to a child one year old. Calomel and Hydrargyrum Cum Cretw-mereury and chalk-should never be given indiscriminately. All such agents should be left to the educated physician. I am sure much injury results to children from the outrages practiced upon them by ignorant mothers and nurses, by dosing them with all kinds of patent nostrums; especially soothing syrups, and almost anything meddlesome neighbors may suggest. It is a deplorable fact that children are dosed too much, and oftener ruined or killed outright than benefited by such reckless dosing. Care not to overfeed and regularity in bathing are essentials that all mothers should attend to; and especially avoid cramming them with the abominable chemical foods that are so extolled by their manufacturers, and too often recommended by physicians. Milk is the natural food for infants, and when the mother can not supply it, she should then resort to the milk of a young, fresh and healthy cow. I have seen some of these patent food compounds contain worms when opened, which eareless nurses

or short-sighted mothers might have cooked for their innocent babes. Just think of such abominable diet!

When you come to a formula marked (F.—), refer to this department and to the corresponding number, and be very careful that the *number* is the same here as in the one mentioned in the treatment of the disease you were reading about, that no mistakes may occur.

All these formulas or prescriptions must be compounded—prepared—by a thoroughly posted prescription druggist and pharmacist; the purity of the drugs or medicines, and the proper compounding of them, are very important. I have written them in the Latin names to compel my readers to apply to a competent druggist to have them dispensed. Where such can not be done, you must depend upon the remedies as recommended singly throughout the book, or as recommended in the chapter on Therapeuties. I prefer Parke, Davis & Co's extracts, as they have always given me satisfaction.

NOTICE.—Any of the readers of this book who are unable to obtain the remedies prescribed in the treatise of the different diseases, at their homes, ean, by sending to the undersigned, be furnished with any of the named remedies. I am prepared to fill any of the prescriptions which are directed to be used (in the quickest possible time), and compounding them of the purest drugs and chemicals. I also keep a stock of a great number of the recipes on hand. When writing, be very careful to mark the number of the formula, the page of the book, and for what disease the remedy is recommended.

GEORGE F. BORST,

Pharmacist and Druggist,

No. 440 South Meridian St., - - - - Indianapolis, Ind.

Dr. Cunningham's Cholera Mixture.

(F• 1•) R. Syrupi Rhei et Potassii Compositi, Tineturæ Opiï Camphoratæ, āāξiy. M.

Signa: For Cholera Morbus—Dose for an adult, a teaspoonful every fifteen minutes until relieved, then every hour. Cholera Infantum—From five to ten drops every fifteen minutes until relieved. Diarrhaa or Dysentery—Dose for an adult, a teaspoonful every two or three hours. For a child one year old, five drops every hour or two; older children in proportion. In ease of vomiting, put one-third of a grain of powdered ipeeae in a glassful of cold water (ice

water), stir thoroughly, and give a teaspoonful every ten minutes until vomiting eeases.

Dr. Cunningham's Ague Pills.

(F. 2 a.) R. Cinchoniæ Sulphatis, zvi. Jii; Ferri Ferrocyanidi, ziiiss; Strychniæ Sulphatis, grs.i; Acidi Arseniosi, grs.i; Euonymin, zi. grs.vi; Pulveris Capsici, zi. M. et ft. mas. in pil. DCCC dividen.

Signa: Dose for an adult, two to four pills every two hours, according to the strength of the patient; women require less than men. Children ten to fifteen years old, one pill every two hours; four to seven years old, one-half of a pill every two hours. Let the patient use lemonade when using the pills. The liver should be aroused to action by taking the Liver Pills.

Dr. C. W. Frisbie's Ague Pills.

(F. 2 b.) R. Quiniæ Sulphatis, 3i; Zinci Sulphatis, 3ss; Capsici, \ni i; Pilulæ Hydrargyri, \ni i. M. et ft. mas. in pil. Lx dividen.

Signa: Commence three hours before the time the chill is expected, and give one pill every hour until six have been taken. In the same way take five the next day, and continue taking one less each day until twenty-one are taken. Take a few pills on the fourteenth and twenty-first days after the commencement.

Dr. Cunningham's Liver Pills.

(F. 3.) R. Podophyllin, 3i; Leptandrin, 3ii; Gambogia, 3i; Sanguinarina Nitratis, grs.viii; Pulveris Capsici, 3ss; Extracti Belladonna, grs.xv; Extracti Nucis Vomica, Extracti Hyoscyami, āā. 3ss. M. et ft. mas. in pil. ccnl dividen.

Signa: Dose for an adult, from one to two pills every six hours till they operate. As an alterative for the liver, take one or two pills every night before going to bed. For a child fifteen years old, one-half to one pill from one to three times a day. For a child six years old, one-fourth to one-half a pill.

Dr. Cunningham's Lung Touic.

(F. 4.) R. Pulveris Radicis Polemonii Reptans, ₹i; Pulveris Euonymi, ₹i; Aquæ Fervidæ, ₹x; Fiat Infusi, ₹viii; Adde Sodii Hypophosphitis, ₹i; Sanguinarinæ Nitratis, grs.iii; Sacehari Albi, ₹viii; Alcoholis, ad. ₹xvi. M. ft. mistura.

Signa: Dose for an adult, one teaspoonful every two hours. If the cough is troublesome, take a teaspoonful every hour until relieved. Fifteen years of age three-quarters of a teaspoonful.

Ten to twelve years of age, one-half teaspoonful. Seven to ten years, twenty drops. Three to five years, eight to ten drops. Under one year, two to four drops. In chronic bronchitis and consumption, take from a dessertspoonful to a tablespoonful every two to four hours. If the bowels are costive, regulate with the Liver Pills.

Dr. Cumingham's Neuralgia Pills.

(F. 5 α.) R. Quiniæ Sulphatis, ∃ii; Strychniæ Sulphatis, grs. ‡; Acidi Arseniosi, grs. ‡; Gelsemin, grs.ii; Extracti Aconiti, grs.ii; Extracti Belladonnæ, grs.i; Extracti Conii, grs.viii; Extracti Hyoseyami, grs.vi; Extracti Opii, grs.v. M. et. ft. mas. in pil. xx dividen.

Signa: Give one pill every two or three hours until relieved.

Prof. C. E. Brown-Sequard's Neuralgia Pills.

(F. 5 b.) R. Extracti Belladonne, grs.x; Extracti Stramonii, grs.xii; Extracti Cannabis Indice, grs.xv; Extracti Aconiti, Əi; Extracti Opii, 3ss; Extracti Hyoscyami, Əii; Extracti Conii, 3i; Pulveris Glycyrrhize, q.s. M. et ft. mas. in pil. Lx dividen.

Signa: One pill every three to six hours until relieved.

Prof. Saunel D. Gross, M. D., Neuvalgia Pills.

(F• 5 e•) R. Quiniæ Sulphatis, ∃ii; Morphiæ Sulphatis, grs. i; Strychniæ Sulphatis, grs.²; Acidi Arseniosi, grs.i; Extracti Aconiti, grs. x. M. et ft. mas. in pil. xx dividen.

Signa: One pill to be taken three or four times a day. Add to the recipe, Ferri Sulphatis, 3ii, if the system is anæmic.

Dr. Cunningham's Female Tonic.

(F. 6.) R. Extracti Cascara Sagrada, f. 3iii; Extracti Caulophylli, f.3iii; Extracti Cimicifuga, f.3iii; Extracti Helonias, f.3vi; Extracti Ergota, f.3iii; Extracti Viburni Prunifoli, f.3vi; Elixir Simplicis, ad. 3xvi. M.

Signa: Take a tablespoonful every three hours for a tonic influence on the womb. A very good tonic for all forms of female weaknesses.

Dr. Cuuuingham's Neuralgia Liuimeut.

 $(F.\ 7.)$ R. Hydratis Chloralis, 5i; Camphore, 5i; Olei Menthæ Piperitæ, 5s; Olei Terebinthiuæ, 5s; Olei Origani, ad. 5ii. M.

Signa: Use for pain in any part of the body, every three to six hours until relieved.

Dr. Cunningham's Catarrh Snuff.

 $(F_{\bullet}, S_{\bullet})$ R. Pulveris Camphora, \Im iv; Pulveris Sanguinaria, \Im ii. M. ft. pulv.

Signa: Use a little as a snuff every two to four hours.

Dr. Cunningham's Skin Purifler.

(F. 9.) R. Hydrargyri Chloridi Corrosivi, grs.ii; Calaminæ Preparatæ, 3i; Zinci Oxidi, 3i; Spiritus Myrciæ, 3i; Glycerinæ, 3ii; Aquæ Rosæ, ad. 3vi. M. ft. lotio.

Signa: Shake well and apply every night on going to bed.

Dr. Cunningham's Worm Powders.

(F. 10.) R. Hydrargyri Chloridi Mitis, 3i; Santonini, 3i, Resinæ Podophylli, grs.v; Sacchari Lactis, 3iv. M. et divide in chartulas LX.

Signa: One three times a day, skip one day and then give three more, and follow with a dose of castor oil or salts.

Dr. Gezow's Corn Cure.

(F. 11.) R. Acidi Salicylici, 3ii; Collodii Elastici, 3iiss; Extracti Cannabis Indica, 3i. M.

Signa: For corns, apply every night with a suitable brush or feather over the entire corn, and after three or four applications, soak the foot in warm water, pull off the film and repeat as often as necessary. For bunions, cut the hard part away and apply the same as to a corn. For warts apply morning and night. Every second day peel off the film and apply as often as necessary. Keep the bottle in a cool place, corked tight, and away from the gas or fire.

(F. 12.) R. Quinia Sulphatis, Jiss; Acidi Tannici, grs. v; Tinctura Gelsemini, gtt. xxx; Tinctura Opii Deodorata, Jiii; Tinctura Veratri Viridis, gtt. v; Spiritus Lavendula Compositi, Ji; Syrupi Zingiberis, ad. Jiii. M. ft. mist.

Signa: From a teaspoonful to a dessertspoonful every two (2) hours.

(F. 13.) R. Extracti Pini Canadensis, f. \(\frac{7}{3}\)iii. (Parke, Davis & Co.)

Signa: A teaspoonful to one pint of lukewarm water and use with either of the syringes, three times a day.

(F. 14.) R. Extracti Cascaræ Sagradæ, f. Žii. (Parke, Davis & Co.)

Signa: From one-half to one teaspoonful three times a day till the bowels act.

 $(F.\ 15.)$ R. Acidi Chrysophanici, \Im i; Acidi Carbolici, \Im i; Cosmolini, \Im ss; Cerati Simplicis, \Im ss. M. ft. unguentum.

Signa: Apply once or twice a day.

(F. 16.) R. Hydrargyri Chloridi Corrosivi, grs. ii; Calaminæ Preparatæ, 3i; Zinci Oxidi, 3i; Glycerinæ, 3ii; Aquæ Rosæ, ad. 3vi. M. ft. lotio.

Signa: Shake well and apply every night on going to bed.

(F. 17.) R. Sulphuris Iodidi, 3ss; Acidi Carbolici, 9i; Cosmolini, 3i. M. ft. unguentum.

Signa: Apply once or twice a day.

(F. 18.) R. Acidi Arseniosi, gr. i; Sacchari Lactis, $\Im v$. M. et divide in chartulas xx.

Signa: One every two or three hours.

(F. 19.) R. Chloralis Hydratis, 3iii; Potassii Bromidi, 3iii; Tincturæ Gelsemini, 3ii; Aquæ Destillatæ, 3ss; Syrupi Acaciæ, ad. 3iv. M. ft. imstura.

Signa: Dessertspoonful every one or two hours.

 $(\textbf{\textit{F.}} \ 20 \, \bullet)$ R. Hydrastin, $\ni i$; Sodii Bi-boratis, $\ni i$; Carbonis Lignic, $\ni s$ ss. M. ft. pulv.

Signa: Put a small quantity in the mouth every two or three hours.

(F. 21.) R. Syrupi Rhei et Potassii Compositi \(\bar{z} \) iii. Signa: A teaspoonful every hour or two.

(F. 22.) R. Extracti Guarane, f.\(\frac{1}{2}\)ii; Tincturæ Aconiti Radcis, gtt.xx; Elixir Potassii Bromidi, \(\frac{1}{2}\)i. M. ft. mistura.

Signa: A teaspoonful every half hour or hour until relieved.

(F. 23.) R. Quiniæ Sulphatis, Əiss; Acidi Tannici, grs.v; Extracti Podophylli, f3i; Extracti Enonymi, f3s; Tincturæ Opii Deodoratæ, 3iii; Syrupi Simplicis, ad. 3vi. M. ft. mistura.

Signa: From a teaspoonful to a dessertspoonful every three hours.

 $(F_{\bullet}\ 24_{\bullet})$ R. Hydrargyri Iodidi Viridis, 3ss; Cerati Simplicis, \bar{z} ss; Cosmolini, \bar{z} iss. M. ft. unguentum.

Signa: Apply twice a day.

 $(F.\ 25.)$ k. Tincture Aconiti Radicis, 3ss, Acidi Sulphurici Diluti, 3i; Syrupi Simplicis, 3i; Aquæ destillatæ, ad. 3iii. M. ft. mistura.

Signa: A dessertspoonful every hour.

(F. 26.) R. Vini Ferri Amaræ, 3iii.

Signa: A dessertspoonful three times a day.

(F. 27.) R. Plumbi Acetatis, 3ii; Acidi Carbolici, 3i; Tincturæ Opii, 3iv; Aquæ Puræ, 3lxiv. M. ft. lotio.

Signa: Use freely as a wash and vaginal injection three or four times a day.

(F. 28.) R. Hydrargyri Chloridi Corrosivi, 3ss; Tincturæ Opii, ₹i; Aquæ Destillatæ, ₹vii. M. ft. lotio.

Signa: For external use only.

(F. 29.) R. Lobeliæ, Ziii; Aquæ Fervidæ, Oii; Fiat Infusi, Oii; Adde Sodii Bicarbonatis, Zii; Acidi Carbolici, Ziv. M. ft. lotio.

Signa: Bathe the parts three or four times a day and inject into the vagina.

- (F, 30.) R. Liquoris Arsenici et Hydrargyri Iodidi, 3ss. Signa: Five to ten drops three times a day, largely diluted with water.
- (F. 31.) R. Unguenti Hydrargyri Nitratis, \(\frac{7}{5}ss \); Cosmolini, \(\frac{7}{5}iss \); Acidi Carbolici, \(\frac{7}{3}i. \) M. ft. unguentum.

Signa: Apply every three or four hours.

(F. 32.) R. Acidi Hydrocyanici, 3ii; Plumbi Acetatis, 3i; Olei Cacao, 3ii. M.

Signa: Apply three or four times a day.

 $(F \cdot 33 \cdot)$ R. Antimonii et Potassii Tartratis, gr.ss; Tincturæ Opii Deodoratæ, π ii; Spiritus Chloroformi, π i; Tincturæ Zingiberis, π ii; Extracti Asclepiadis Tuberosæ, π i; Syrupi Simplicis, ad. π ii. M. ft. mistura.

Signa: A teaspoonful in water every half hour or hour till easy.

(F. 34.) R. Potassii Citratis, 3ii; Spiritus Ætheris Nitrici, 3ss; Tineturæ Digitalis, 3i; Aquæ Menthæ Viridis, 3ii; Syrupi Simplicis, ad.3iii. M. ft. mistura.

Signa: A dessertspoonful every two or three hours.

(F. 35.) R. Apocynin, Euonymin, āā. 5ss; Elaterii, grs.i; Pulveris Capsici, grs.v; Extracti Nucis Vomicæ, grs.v. M. ct ft. mas. in pil. xx dividen.

Signa: One every three to six hours till they act.

(F. 36.) R. Liquoris Ammoniæ, 3i; Spiritus Chloroformi, 3ii; Tincturæ Camphoræ, 3s; Tincturæ Opii Deodoratæ, 3s;

Spiritus Lavendulæ Compositi, 3ii; Extracti Geranii, 3ss; Syrupi Zingiberis, ad. 3iv. M. ft. mistura.

Signa: Small teaspoonful every fifteen minutes to one, two or three hours, according to the urgency.

 $(F_{\bullet} \ 37.)$ R. Spiritus Chloroformi, 5ii; Tincturæ Zingiberis, 5ss; Aquæ Menthæ Piperitæ, 5ii; Syrupi Simplicis, ad. 5iii. M. ft. mistura.

Signa: A teaspoonful to a tablespoonful every one, two or three hours, according to the urgency of the case.

(F. 38.) R. Atropiæ Sulphatis, grs.ss; Acidi Sulphurici Aromatici, $\bar{3}$ ss; Tincturæ Cinchonæ Compositæ, $\bar{3}$ ii; Syrupi Zingiberis, ad. $\bar{3}$ iv. M. ft. miştura.

Signa: A teaspoonful every three hours.

 $(F.\ 39.)$ R. Acidi Sulphurici Diluti, 3ii; Acidi Phosphorici Diluti, 3i; Aquæ Menthæ Piperitæ, 5ii; Syrupi Simplicis, ad. 5iii. M. ft. mistura.

Signa: A teaspoonful to a tablespoonful every one to three hours.

(F. 40.) R. Tincturæ Rhei, \(\frac{1}{2}\)iv; Tincturæ Capsici, \(\frac{1}{2}\)i; Tincturæ Camphoræ, \(\frac{1}{2}\)i; Spiritus Anisi, \(\frac{1}{2}\)i; Tincturæ Kino, \(\frac{1}{2}\)vi; Spiritus Ammoniæ Aromatici, \(\frac{1}{2}\)i. M. ft. mistura.

Signa: Three to ten drops every ten to thirty minutes.

(F. 41.) R. Sodii Salicylici, 5iii; Tincturæ Digitalis, 5i; Tincturæ Phytollacæ, 5i; Tincturæ Cimicifugæ, 5ss; Tincturæ Opii Deodoratæ, 5iii; Aquæ Menthæ Viridis, 5ii; Syrupi Simplicis, ad. 5iv. M. ft. mistura.

Signa: A dessertspoonful every two or four hours.

 $(F_{\bullet} 42.)$ R. Acidi Salicylici Effervescentes. (Fryc's Granular.)

Signa: One teaspoonful in water every two, three or four hours.

(F. 43.) R. Chloralis Hydratis, 3iii; Potassii Bromidi, 3iii; Tincturæ Digitalis, 3i; Tincturæ Phytolaccæ, 3i; Aquæ Menthæ Viridis, 3i; Syrupi Acaciæ, ad.3iv. M. ft. mistura.

Signa: A dessertspoonful every one, two or three hours, till easy.

(F. 44.) R. Potassii Iodidi, 3ss; Hydrargyri Iodidi Rubri, grs.ii; Aquae Cinuamoni, 3ss. M. ft. solut.

Signa: Ten drops in a swallow of water after each meal, three times a day, increasing one drop each day up to twenty, unless there are symptoms, as cold in the nose and throat—which may arise from the medicinc—and if so, drop back to ten drops.

(F. 45.) R. Potassii Bicarbonatis, 3i; Extracti Uvæ Ursi, f. $\bar{3}$ i; Extracti Barosmæ, f. $\bar{3}$ i; Spiritus Ætheris Nitrici, $\bar{3}$ ss; Syrupi Acaciæ, ad. $\bar{3}$ iv. M. ft. mistura.

Signa: A dessertspoonful every three hours.

(F. 46.) R. Extracti Corydalidis Formose, f. \(\frac{7}{2}\)i Extracti Rumicis Crispi, f.\(\frac{7}{2}\)i. Extracti Lappæ Majoræ, f.\(\frac{7}{2}\)i; Tincturæ Phytolaccæ, \(\frac{7}{2}\)iii; Syrupi Stillingiæ Compositi, ad. \(\frac{7}{2}\)xvi. M. ft. mistura.

Signa: A tablespoonful three times a day.

(F. 47.) R. Sodii Hypophosphitis, 5ii; Calcii Hypophosphitis, 5ii; Tincturæ Nucis Vomicæ, 5ii; Tincturæ Cinchonæ Composite, 5iii; Syrnpi Stillingiæ Compositi, ad. 5vi. M. ft. mistura.

Signa: A dessertspoonful every three hours.

(F. 48.) R. Tincturæ Opii Deodoratæ, 3iii; Tincturæ Aconiti Radicis, 3ss; Tincturæ Veratri Viridis, 3ss. M.

Signa: Ten drops every half hour or hour in water till casy; then every two or three hours. If there is much cough (F. 33) will be preferable.

(F. 49.) R. Pulveris Cinnamoni, \(\bar{z}i \); Pulveris Caryophylli, \(\bar{z}i \); Pulveris Pimentæ, \(\bar{z}i \). M.

Signa: Moisten with warm whisky and put between two cloths and lay over the stomach, then pour a tablespoonful of warm whisky over the poultice every half hour. This will often relieve vomiting when all other remedies fail.

(F. 50.) R. Extracti Cascaræ Sagradæ, f.\(\frac{7}{3}\) iss; Acidi Nitro-Muriatici Diluti, \(\frac{7}{3}\) ii; Syrupi Zingiberis, \(\frac{7}{3}\) ii; Tincturæ Cinchonæ Compositæ, ad.\(\frac{7}{3}\) vi. M.

Signa: A tablespoonful every three hours in water.

(F. 51.) R. Tincturæ Opii Camphoratæ, §iss; Elixir Potassii Bromidi, §iss. M.

Signa: Dessertspoonful every one, two or three hours until relieved.

(F. 52.) R. Quiniæ Sulphatis, 3ss; Acidi Tannici, grs.v; Tincturæ Opii Deodoratæ, 3ii; Tincturæ Gelsemini, 3ss; Spiritus Lavendulae Compositi, 3i; Emulsionis Olei Ricini, 3ss; Emulsionis Olei Terebinthinæ (3i-3i), 3i; Emulsionis Olei Morrhuæ, 3i; Syrupi Zingiberis, ad. 3iii. M. ft. mistura.

Signa: A dessertspoonful every two hours to an adult. To a child one year old, five to ten drops. Older children in proportion.

(F. 53.) R. Veratriæ, Di; Cosmolini, Ji. M. ft. unguentum. Signa: Apply every two or three hours.

Tilbury Fox, M. D., London.

 $(F_{\bullet} \ 54.)$ R. Sulphuris, 3ss; Hydrargyri Ammoniati, grs.iv; Creasoti, gtt.iv; Olei Anthemides, gtt.x; Adipis, $\tilde{\mathfrak{Z}}$ i. M. ft. unguentum.

Signa: This is to be applied uight and morning, and be careful to rub on each suspicious-looking pimple. Keep the same underclothing on till the third day, then change and take a warm bath.

Prof. Henry Hartshorne

Recommends (F. 55) for choleric and cholera diarrhea:

(F. 55.) R. Chloroformi, Jiss; Tincturæ Opii, Jiss; Spiritus Ammoniæ Aromatici, Jiss; Tincturæ Camphoræ, Jiss; Spiritus Vini Gallici, Jii; Olci Cinnamoni, mxx. M.

Signa: Shake well and give a teaspoonful with water every half hour or hour until relieved.

(F. 56.) R. Ferri Bromidi, 3ii; Potassii Bromidi, 3ss; Elixir Calisayæ, 3vi. M.

Signa: A dessertspoonful every three hours.

(F. 57.) R. Acidi Tannici, 3ss; Hydrastin, grs.xv; Morphiæ Sulphatis, grs.vi; Tincturæ Aconiti Radicis, 3ii; Glycerinæ, $\tilde{\pi}$ ii; Aquæ Destillatæ, ad. $\tilde{\pi}$ viii. M.

Signa: Apply every three to six hours to acute ulcers.

(F. 58.) R. Acidi Carbolici, 3ii; Tincturæ Opii, 3iii; Tincturæ Lobeliæ, 3ii; Tincturæ Myrrhæ, 3ii; Glycerinæ, 3ii; Aquæ Destillatæ, ad. Oi. M. ft. lotio.

Signa: Apply to acute ulcers every three to six hours.

 $(F_{\bullet} \ 59_{\bullet})$ Tincturæ Capsici, $\bar{\mathfrak{z}}_{i}$; Tincturæ Myrrhæ, $\bar{\mathfrak{z}}_{i}$; Tincturæ Sanguinariæ, $\bar{\mathfrak{z}}_{i}$; Tincturæ Cinchonæ, $\bar{\mathfrak{z}}_{i}$; Acidi Carbolici, $\bar{\mathfrak{z}}_{i}$. M.

Signa: Apply every three to six hours to indolent or ehronic ulcers.

 $(F_{\bullet} \ G \ O_{\bullet})$ R. Argenti Nitratis, \ni i; Acidi Carbolici, \ni i; Cerati Simplicis, \ni i; Cosmolini, \ni i. M. ft. unguent.

Signa: Apply from one to three times a day.

(F. 61.) R. Ungnenti Zinci Oxidi, \(\frac{1}{2}\)i; Cosmolini, \(\frac{1}{2}\)i; Acidi Carbolici, \(\frac{1}{2}\)i. M. ft. unguent.

Signa: Apply to the ulcer every three to six hours.

(F. 62.) R. Pulveris Sassafras, $\bar{\mathfrak{z}}_i$; Pulveris Sanguinariæ, $\bar{\mathfrak{z}}_i$; Pulveris Hydrastis, $\bar{\mathfrak{z}}_i$; Pulveris Cinchonæ, $\bar{\mathfrak{z}}_i$; Pulveris Carbonis Ligni, $\bar{\mathfrak{z}}_i$. M.

Signa: Moisten with water and apply to the naked ulcer, and keep moist with whisky and water.

(F. 63.) R. Hydrargri Iodidi Viridis, 3ss; Cosmolini, 3ss Cerati Simplicis, 3ss; Acidi Carbolici, 3ss. M. ft. unguent. Signa: Apply every three or six hours.

Dr. Bright's Recipe for Cancer.

(F. 64.) R. Zinci Chloridi, 3ii; Extracti Podophylli, 3iv; Santali, q.s. to make it porous.

Signa: Apply after blistering the surface. This is a very severe treatment, and one I could not recommend. Bright also recomends hypodermic injections of the solution of chloride of zine at different points of the tumor and injecting deep into the cancer. After the part is whitish or gray in appearance, it must be poulticed until the dead tissue falls out; then dress as a wound or an acute ulcer (F. 57). The extract of clover-heads or sheep-sorrel will destroy the tissue; also Vienna paste.

(F. 65.) R. Acidi Tannici, 3i; Acidi Carbolici, 3i; Tinetura Opii, 3ii; Aqna, ad. 3viii. M.

Signa: Apply to the wound every one or two hours, and lay a piece of lint saturated with the wash over the wound.

 $(F_{\bullet} \ 66.)$ R. Pulveris Ipecacuanhæ, grs. $\frac{1}{3}$; Sacchari Lactis, grs.v. M.

Signa: Put in a glassful of ice-water and give a teaspoonful every ten minutes until vomiting ceases.

Amenorrhœa Pills.

(F. 67.) R. Pulveris Aloes Socotrinæ, 3ii; Ferri Sulphatis, 3ii; Podophyllin, grs.xii; Pulveris Capsici, Əii; Olei Sabinæ, gtt.exx; Ergotini, Əiv: Extracti Hellebori Nigri, Əii. M. et ft. mas. in caps. exx dividen.

Signa: Take one every three to six hours. This prescription will be found valuable for suppression of the menses, especially when due to cold, but should never be used when pregnancy is expected, as they then might do great and irreparable injury.

THERAPEUTICS.

Abscesses.—Belladonna, five to ten drops of the tincture every one or two hours is often beneficial. Carbolic acid, use one part of acid to 32 or 64 parts of water, by injection. Counter-Irritatation, Blisters or Tincture of Iodine, applied over or around the abseess. Ether, as a spray to produce local anæsthesia in opening an abscess. Iodine, inject the tincture into the cavities of an abscess after the emptying thereof. Poultices, very beneficial to assist in opening sooner. The ointment of Belladonna or Opium may be applied.

Acidity of the Stomach.—Acids, before meals, either dilute hydrochloric or nitric acid, from three to ten drops, in a swallow of water. Alkalies, for distention of the stomach from gas (F. 21), or bicarbonate of soda, three to five grains, in water, but it should not be used to excess, so as to injure the mucous membrane of the stomach. Tincture of Nux Vomica, two or three drops, before meals, for acidity of the stomach, especially in pregnancy.

Acne.—Fowler's Solution of Arsenic, from one-half to ten drops, according to age, three times a day (in water), after meals. Bromide of Potassium, in one to ten-grain doses, but, if continued for some time, must be given in combination with Fowler's solution, so as to prevent bromic acne. Chrysophanic Acid, is the best remedy known to the author (F. 15). Hot sponging, is also useful. Corrosive Sublimate (F. 10), to be used as a lotion. Iodide of Sulphur Ointment (F. 17), may be often used with success. Bathing, the face often with hot water, using sulphur soap.

Ague.—Quinine, in one to ten grain doses every two to six hours, (F. 12) which is much better than the pure quinine in all cases of intermittent or remittant fever, and especially if the spleen is enlarged. Fowler's Solution of Arsenie, in chronic ague in doses from one to ten (10) drops three times a day after meals, in water, or (F. 18). Soda Hyposulphite, ten to twenty grains in a glass of water every three to six hours. Cinchonidia or Cinchonia, one to ten grains every two or six hours. Salicylic Acid, is sometimes used as a substitute for quinine, and may be given in doses of five to twenty

grains every two hours. Chinoidine is also beneficial, but it disagrees with some persons, producing nausea, vomiting and pain. Dose, five to ten grains.

- Alcoholism.—Dypsomania. Fowler's Solution of Arsenic, one to two drops, for vomiting and a rough and red tongue. Ipecac (F. 66), to stop vomiting. Chlor-Anodyne (Parke, Davis & Co.), five to twenty drops every half to two or three hours. Tincture of Nux Vomica, one to ten drops every three or four hours. Bromide of Potassium and Chloral (F. 19) should be given so as to quiet the patient and induce rest.
- Amenor hoea.—Tincture of Aconite, when menses are suddenly cheeked, one to five drops every one or two hours. Tincture of Black Cohosh, when menses are eheeked, ten to sixty drops every three to six hours. Macrotin, one to two grains every three to six hours. Bromide of Potassium and Guarana for headache (F. 22). Tincture of Iron, five to ten drops in water three or four times a day for anæmia. Dialyzed Iron, one-half to one teaspoonful three times a day in water. Hot sitz baths three nights in succession and repeated every ten days. Spinal ice bag applied to the spine for fifteen or twenty minutes.
- Anemia.—Bloodlessness. Acid Muriatic, Sulphuric or Nitric, dilute, in doses of two to ten drops three times daily in a wine-glassful of water. Tincture of Iron, five to ten drops three times a day in half a glass of water. Dialyzed Iron, twenty to sixty drops three times a day in rain water. Quinine, in malarial districts in doses of two to ten grains three times a day. Bitter Wine of Iron. A teaspoonful every three to six hours as a tonic. Wine of Beefand Iron. A dessertspoonful three times daily. Elix. Calisaya, Iron and Strychnia, teaspoonful of, three times a day. Cold sponging once a day.
- Angina Pectoris.—Pain in the left breast in the region of the nipple. Fowler's Solution of Arsenic, five to ten drops three times a day in water. Hoffman's Anodyne, teaspoonful every half to two or three hours until relieved Spirits ehloroform, five to en drops every half hour or hour until relieved. Nitrate Amyl, five drops on a handkerehief and inhale until relieved; or, still better, take one of Parke, Davis & Co.'s nitrate of amyl pearls and break in a handkerchief. Very poisonous, and should be used with eaution. Nitroglycerin, in doses of one drop of the one per cent. solution in whisky every two or three hours.

- Anthelminities—(Worms.)—(F. 9.) One powder three times a day before eating, with sugar. Fluid Extract of Spigelia and Senna, five to ten drops three times a day. Levant Worm Seed, powdered, from five to thirty grains three times a day. Wormwood, in powder of five to forty grains three times a day, or make an infusion of an ounce to the pint and give from a teaspoonful to two tablespoonfuls.
- Apthw.—(F. 1) as directed. (F. 20.) Put on the tongue every three to six hours. Chlorate of Potash, two to five grains every three to six hours. Nitric Acid, dilute. Honey and Glycerine, equal parts, mixed and applied every two hours.
- Apoplexy.—Bleeding is sometimes very beneficial. Croton Oil as a eathertic in doses of one-fourth to one drop made into a pill with a crumb of bread. Bromide of Potassium, five to twenty grains dissolved in water, given every hour as soon as the patient can swallow. Fluid Extract of Ergot (Parke, Davis & Co.), twenty drops to a teaspoonful every two or three hours.
- Ascites.—Dropsy of the abdomen. Balsam of Copaiva, ten to sixty drops every two or three hours. Elaterium, one-sixteenth of a grain every hour until it operates. Tineture of Digitalis, when the heart is not seriously implicated, five to fifteen drops every three to six hours. Tineture of Iron, ten drops three times a day in water. Dialyzed Iron, twenty to sixty drops three times a day in water. Vapor baths or wet sheet paeks.
- Asthma.—Tincture of Aconite Root, when feverish, in doses of one to five drops every hour. Quinine in two-grain doses, with one drop of oil lobelia every one, two or three hours. Nutrate of Amyl by inhalation, five drops on a handkerchief, or one of Parke, Davis & Co.'s nitrate of amyl pearls for immediate relief, but it must be used with great eaution as it is very poisonous. Tincture of Lobelia in half teaspoonful doses with water until the point of nausea is reached.
- Barrenness.—Iodide of Potash, five to ten grains three times a day, when due to syphilis. But no syphilitic man or woman should procreate their kind. When due to flexion of the womb, or any form of womb disease, see lectures on female complaints.
- Bed Sores.—Alcohol. Use by bathing the skin, diluted with water. Tincture of Camphor is also good to prevent bed sores. Tincture of Catchu may also be used as a lotion. Poulticing with ehareoal and yeast. Iodofrm may be used to dust on the sores. Collodion may also be applied to the wound. Frequent sponging.

- Biliousness.—Podophyllin given from one-twelfth to one-fourth of a grain once or twice a day. Leptandrin, one to ten grains once or twice a day. Euonymine, one to ten grains once or twice a day. Apocymine, one to ten grains once or twice a day. Blue Mass, from five to twenty grains once a day. Calomel, from two to twenty grains once a day.
- Bilious Headache—Sick Headache.—Fluid Extract of Guarana, one-half to one teaspoonful, every one-half to one hour. Elixir of Bromide Potassium, a teaspoonful every one, two or three hours. (F. 3) or (F. 14.)
- Bee Stings and Bites of Serpents.—Aqua Ammonia applied freely. Free incision for serpent bites, and eauterize with Lunar Caustic. Whisky in large doses internally.
- Bladder Diseases.—Balsam of Copaiva, ten to sixty drops every three hours. Fluid Extract of Cubebs, from ten to thirty drops every three hours. Fluid Extract of Buchu, from ten to sixty drops every three hours. Iodoform Suppositories, one to five grains in each suppository, and use one every six hours. Hyposulphite of Soda, five to fifteen grains every two hours, to prevent putrefaction. Flaxseed, Slippery Elm, or Marshmallow Teas may be also used.
- Boils.—Tincture of Iodine, to be applied once or twice a day, or inject hypodermically. Blisters, may be used. Collodion, applied once or twice a day. Cauterize with lunar caustic. Poultices. Opium, in one-grain doses every one, two or three hours, to relieve pain, or Morphia, one-fourth grain.
- Bone Diseases.—Cod-Liver Oil, internally. Hypophosphites of Lime or Soda in caries—dead bone—from two to five grains two or three times a day. Syrup Iodide of Iron, ten to thirty drops after meals in a wincglassful of water. Iodide of Potassium, in one to five-grain doses. Dialyzed Iron, five to twenty drops three times a day in water. Quinine, in malarial districts. Poultices and Fomentations to the affected part.
- Brain Diseases—Paralysis.—Bromide of Potassium, for passive congestion due to excessive study or close attention to business; give two to five grains every two to six hours. Phosphorous, in cerebral softening, one-sixtieth to one-fiftieth of a grain three times a day. Phosphoric Acid, dilute, five to thirty drops three times a day. Frequent baths and regular rest.
- Breast, Inflammation of.—Belladonna Liniment, use three times a day, or a fomentation of hops and belladonna. Ice,

may be applied in the early stages of the disease. Strapping, with adhesive plaster, to prevent the formation of pus, is very good.

Breath, Foul.—Removal of all decayed teeth. Camphor, to be used with a dentifrice. Charcoal, use as a tooth-powder, and take a teaspoonful internally three times a day. Carbolic Acid, diluted, as a mouth wash.

Bright's Disease.—Acetate of Potassium, ten to twenty grains in water, every three hours. Bitartrate of Potassium, a teaspoonful in water, every six hours. Sweet Spirits Nitre, ten to forty drops every three hours. Bromide of Potassium, for convulsions, five to twenty grains, every one or two hours. Tincture of Cantharides, one drop every three hours, in sub-aeutc and chronic cases, and to check hemorrhage of the kidneys. Balsam of Copaiva, ten to twenty drops, every two or three hours. Tincture of Digitalis, five to twenty drops, three times a day. Elaterium, one-sixteenth of a grain, one, two or three times a day. Quinine, in malarial districts. (F. 12.) Warm Baths, for dropsy and symptoms of poisoning from the retention of uric acid. Turkish Baths, Cod-liver Oil, for debility. Tincture of Iron, ten drops three times a day, in water. Dialyzed Iron, twenty to sixty drops, three times a day.

Bronchitis.—Ammonia Muriate, two to ten grains, every two or three hours, to lessen excessive expectoration. Tineture of Aconite Root, in acute cases, one to three drops every hour. Quinine, in malarial districts, two to ten grains every two or three hours. (F. 12) and (F. 4) for cough. Balsam Peru, five to twenty drops on sugar, every three hours in chronic eases. Iodine Liniment, applied over the breast to lessen cough and expectoration in chronic bronchial catarrh. Opiates, when the cough is very troublesome.

Bronchocele—Goitre.—Tincture of Iodine or ointment applied locally once or twice a day. Iodide of Potassium, internally, one to five grains, three times a day.

Bruises.—Tincture of Capsicum, to prevent discoloration or to remove it. Sulphurous Acid, used as a lotion, applied every hour.

Bubo.— Tincture of Iodine, by injection hypodermically, or pure Carbolic Acid; local application of (F. 24). Poultices are very beneficial.

Burns.—Collodion, painted over immediately, gives relief. Bicarb. Soda, moistened and applied. Linseed Oil and Line-water, equal parts—Carron Oil—is an excellent thing. Opium, to re-

lieve pain, one-sixtieth to one-twentieth of a grain for a child one year old, and one grain to an adult, every one, two or three hours until relieved. *Cotton*, eovered with lime-water liniment, to be used to wrap around the burnt part, so as to prevent the access of air.

- Calculi—Stone of the Bladder.—Citrate of Potassium, ten to twenty grains every three or four hours, in water. Fluid Extract of Hydrangea, ten to twenty drops every three to six hours, in water. Opiates, to relieve pain. Morphine, in one-eighth to onefourth-grain doses every two or three hours until relieved.
- Cancer.—Carbolic Acid, pure, to be used before applying eausties. Carbonic Acid Gas, to be injected into the vagina in eaneer of the uterns, to relieve pain. Chian Turpentine, ten to twenty grains every two hours. Glycerine and Carbolic Acid, solution to be applied to the feeted eaneer of the uterus. Glycerite of Tannin, with the addition of Carbolic Acid, used by injection, ehecks the discharge and feeter of uterine eaneer. Warm Enemata, to relieve pain and straining, in eancer of the intestine. A Solution of Chloride of Zinc, injected into the caneer, or (F. 64).
- Cancrum—Labialis—lips—and Oris—month.—Arsenic, one sixtieth to one twentieth of a grain every three to six hours. Nitric Acid, to be applied to the sore surface.
- Cankery Taste.—Mereury, Blue Mass, five grains every six hours until it operates. Podophyllin, one-twelfth to one-fourth of a grain. Water, take a half gobletful of pure cold water one hour before breakfast.
- Carbuncle.—Belladonna Ointment, locally applied to allay pain.

 Carbolic Acid, absorbent cotton saturated with the following solution: Carbolic acid, 3ii; glycerine, \$\overline{z}\$vi; apply to the wound and cover with carbolated lint. Tincture of Iodine, applied around the carbuncle to reduce inflammation, and inject into the cavity; Carbolic Acid and Sweet Oil, in equal parts, may also be injected. Poultices, are also very beneficial. Apply equal parts of Belladonna and Iodine Ointment before putting on the poultice. Strapping, with adhesive plaster, beneficial sometimes, by arresting its extension.
- Catarrh.—Tincture of Cimicifuga, ten drops every two hours if the patient has headache, or a dull aching pain in the bones, or stiffness of muscles. Tartar Emetic, one-sixteenth of a grain every three hours. Ipecacuanha, one-sixth of a grain every two hours. Turkish Baths are said to be useful in chronic eatarrh. Warm Foot-baths, before retiring, are beneficial.

- Chancres.—Caustic Soda and Potash, to cauterize the hard edges. Iodoform, dusted over the soft chancres, or use an ointment of Iodoform. Nitrie Acid, to cauterize soft chancres. Peroxide of Hydrogen, to be used as a wash three times a day; apply absorbent cotton saturated in it—said to destroy its specific character.
- Change of Life.—Tineture of Cimieifuga, ten to forty drops every. two hours, for headache. Bromide of Potassium, for melancholy and sleeplessness, often attended with flushings and perspiration, ten to thirty grains every two hours. Tineture of Iron, fifteen drops in water, after meals. Nitrate of Anyl Pearls. Warm Baths, once or twice a week.
- Chaps.—Cold Cream or Cosmoline, applied to the chaps, are very beneficial. Glycerine and Starch, may also be used.
- Chest, Pains in.—Belladonna Plaster, when there is tenderness.

 Iodine Ointment, may be used when pains are severe.
- Chilblains.—Balsam Peru and Beeswar, make good applications, if very sore. Iodine Ointment, is very good. Turpentine and Camphor, if the surface is not broken.
- Chlorosis.—Hypophosphites of Lime or Soda, five grains after meals, in water. Tineture of Iron, ten drops in water, after meals. Dialyzed Iron, twenty to thirty drops after meals, in water.
- Cholera and Choleric Diarrha.—Arsenic, one-twentieth to one-tenth of a grain every three hours, for vomiting. Tineture of Camphor, two to six drops every five to ten minutes until relieved, then every one or two hours. Acetate of Lead, one-eighth grain every fifteen minutes, is sometimes used in the early stage. Morphia, hypodermically, one-eighth to one-fourth grain is very good. Spinal Ice-bag, for cramps. Tineture of Aconite, one drop every hour. Camphor, one half to one grain, every half-hour or hour. Bromide of Potassium, ten grains every hour. Tineture of Cantharides, one drop after meals in water.
- Chorea.—Tincture of Cimicifuga, ten to forty drops every three hours. Arsenic, the one-fortieth to the one-twentieth of a grain every three hours. Chloral, (F. 19) when restless. Cod-liver Oil, one tablespoonful three times a day, or Tineture of Iron, ten drops in water after meals. Spinal Icc-bags may be used with benefit.
- Colic.—Alum, ten grains every hour, frequently used in lead colie. Chloroform Spirits, ten to twenty drops, in water, every hour. Lime-water, for young ehildren, if the milk is soured in the stomach, and forms into lumps, and these passing through

- the intestine causes pain. Fomentations, all kinds. Fennelseed Tea, for young children. Warm Baths, are also good. (F. 1.)
- Coma.—Cream of Tartar, in teaspoonful doses, as a purgative, if blood is poisoned. Mustard Plaster, or Blisters, are very useful. Cold Douche, for stupor or drunkenness, or opium poisoning, which should be kept up for a long time if pulse and breathing improve.
- Conjunctivitis of the Eyes.—Sulphate of Atropia, one grain to an ounce of distilled water; drop a few drops in the eye every six hours. Blisters, behind the car. Castor Oil, often allays pain if dropped in the eye. Sulphate of Zinc, one grain; Morphine, two grains; Water, one ounce; drop in the eye every six hours.
- Constipation.—Fluid Extract of Cascara, fifteen to sixty drops every six hours. Fluid Extract of Podophyllum, five to ten drops every three hours. Extract of Nux Vomica, one-fourth grain after meals. Rhubarb, five to twenty grains.
- Convulsions.—Bromide of Potassium, in all forms of convulsions, five to thirty grains every two hours. Chloral, for children, one to three grains, by mouth or rectum. Spinal Ice-Bags, may also be used, and ice to the head.
- Coryza—Hay Fever. Tincture of Aconite, two to five drops every hour, in severe colds, with a quick pulse and hot, dry skin. Chlorate of Potassium Lozenges, two grains each, one every two hours. Turkish Baths, in coryza.
- Cough.—Alum, one to ten grains every two hours, for spasmodic cough. Cod-Liver Oil, if the cough is of long standing. Wine of Ipecac, five to twenty drops every two hours, for acute cases. Puregoric, half teaspoonful every three hours. Tar, in winter cough, and especially if it comes on in paroxysms. (F. 4.) Muriate of Ammonia, five to ten grains, to check excessive expectoration, every three hours.
- Croup.—Alum, powdered, a teaspoonful in honey or syrup every ten minutes until vomiting ensues. Tincture of Lobclia, one teaspoonful every ten minutes. Syrup of Squills, one teaspoonful every ten minutes, or Senega Syrup, a teaspoonful every ten minutes until vomiting occurs.
- Cystitis.—Fluid Extract of Buchu, ten to forty drops every two hours. Bicarbonate of Potassium, five grains every two hours, to render the urine alkaline, or the Citrate may be used in same doses. Tincture of Cantharides, one drop three times a day, in wa-

- ter. Tincture of Opium, ten drops, in stareh water, which, if used by injection, will subdue pain and frequent urinating.
- Dandruff.—Borax, use a saturated solution thereof several times a day, or use soap and borax as a shampoo.
- Deafness .- Glycerine, a few drops in the ear several times a day.
- Debility.—Cod-liver Oil, in chronic weakness, either young or old. Hypophosphites of Lime or Soda, five grains three times a day. Dialyzed Iron, twenty to sixty drops three times a day. Quinia, one grain three times a day, or the Elixir of Calisaya Bark with Iron and Strychnia, one teaspoonful after meals.
- Delirium.—Bromide of Potassium, ten to thirty grains every one or two hours. Chloral, in violent fevers, five to twenty grains every three hours. Cold Douche.
- Delirium Tremens.—Bromide of Potassium, (F. 19), very useful. Iee, to the head. Fluid Extract of Valerian, one teaspoonful every hour till rest is seenred.
- **Despondency.**—Bromide of Potassium, five grains every two hours. Phosphorus, the one-hundredth to the one-fiftieth of a grain every three to six hours.
- Diarrhea.—Subnitrate of Bismuth, five to twenty grains every three hours, or one-half grain of Calomet for young ehildren, every two hours. Castor Oil, in early stages. Injections of Starchwater, with from three to fifteen drops of Laudanum. Syrup of Rhubarb and Potash, for children, in half-teaspoonful doses every hour. Oxide of Zinc, one to three grains every two hours for ehildren.
- Diphtheria.—Ice, to be sucked at commencement and keep up till the disease subsides. Tineture of Iron, ten to twenty drops in water every hour, and apply to the throat with a brush. Chlorate of Potassium, use as a gargle, with Lactic Acid, each one drachm to a pint of water.
- Dropsy.—Cream of Tartar, in small doses several times a day.

 Jalap, in combination with Cream of Tartar, thirty grains every three hours. Tineture of Digitalis, three to ten drops after meals.
- Dysentery.—Fluid Extract of Hamamelis, when the discharges are bloody, ten to sixty minims every two or three hours. Acetate of Lead and Opium, in grain doses, every two or three hours, for purging. Opium Gum, one to two grains every two or three hours, for purging.
- Ear Diseases.—Counter irritation, as Blisters or Croton Oil bebehind the ears, often relieves earache. Laudanum and Sweet

Oil, equal parts, dropped into the ear. Glycerine, dropped into the ear is very useful.

- Erysipelas.—Tincture of Aconite, one or two drops every hour when feverish. Collodion, painted over the surface. Iodine, apply to the affected part to prevent spreading. Tincture of Iron, five to ten drops every two hours in water. Quinine, two to five grains every two hours, or with iron every six hours.
- Faintings.—Brandy or Wine, when from fright, etc. Ammonia, held to the nostrils and inhale. Cold Water, sprinkled on the face. Put the patient's head horizontal with the body.
- Fevers.—Acid Drinks, such as Raspberry or Current Syrup, or Vinegar, Tincture of Aconite, onc, two or three drops every hour, Cold Affusions, applied to the forelead, often repeated, for headache, Cold Baths, if used at commencement, lower the pulse, prevent delirium, produce sleep, and often prevent bed-sores. Cold Sheet Packs, are sometimes very useful, to reduce the temperature. Tincture of Digitalis, five to twenty drops every two hours, to reduce the pulse and temperature; very useful in typhoid (it must be used carefully). Hot Affusions, over forehead, for headache, is often better than cold. Ice, sucked or swallowed in small pieces, allays pain and vomiting. Chloral Hydrate or Bromide of Potassium, each five to ten grains every two hours, for delirium or sleeplessness. Opium, one-fourth to one grain every hour or two, for delirium or pain. Phosphate of Calcium, ten to thirty grains three times a day, for hectic fevers. Quinine, two to five grains every two hours, is especially useful in typhoid. Salicylic Acid or Salicylate of Soda, three to ten grains every two hours, very useful in rheumatic fevers.
- Flatulence.—Assafætida, one grain every two hours, in capsules, or use from a half to four ounces of the Milk of Assafætida to half pint of Water; inject into the rectum and retain. Charcoal, ten to twenty grains before or after meals, for sour stomach, or (F. 1). Extract of Nux Vomica, one-fourth grain after meals, if due to constipation. Sulphurous Acid, if produced by fermentation, three to ten drops every hour.
- Enlarged Glands.—Iodide of Potassium Ointment, for enlarged glands, mamma, or testicles. Belladonna, or the Iodine Ointment are very beneficial, if applied once a day, also Hop Fomentations.
- Gout.—Tineture of Aconite, two to five drops every hour, for gouty pains. Fly Blisters, are also very useful in ehronic or

sub-aeute gout. Winc of Colchicum, twenty to sixty drops every three to six hours, to remove the pain. Iodide of Potassium, five to ten grains every six hours, is very useful for those who suffer during the night. Japanese Peppermint Oil, if used locally, will often relieve, if applied often. Turkish Baths, in acute or chronic gout, once or twice a week, often give relief. Veratria Ointment, may be used several times a day over the seat of pain.

Hemorrhages of all Kinds.—Ammonio Ferric Alum, two to five grains every two hours, for internal hemorrhage. Fluid Extract of Ergot, one-fourth to one teaspoonful every two hours. Fluid Extract of Hamamelis, one-fourth to one teaspoonful every one or two hours. Ice, should be used locally to wounds. Subsulphate of Iron and the Tincture of Iron, applied locally, or give two drops every two hours. Tunnic or Gallic Acid, in solutions, are used both for internal and external use. For internal use, take from two to five grains every hour. Quinine, in intermittent hemorrhage, from two to five grains every three hours.

Headache.—Iodide of Potassium, for frontal headache, give two grains, dissolved in water. Bromide of Potassium, ten to thirty grains every one or two hours until relieved. Fluid Extract of Guarana, ten to sixty drops every one or two hours until relieved. Coca, one-half teaspoonful every half hour or hour.

Herpes.—Collodion, painted over the part is very highly recommended. Tincture of Iodine, or Ointment applied several times. Nitrate of Silver, in solution of ten grains to the ounce, to be painted on before or as soon as the vesieles form.

Hourseness.—Alum, ten grains to an ounce of water, to be used with the atomizer in chronic coughs and hourseness. Borax, a small piece taken in the mouth and allowed to dissolve gradually. Nitrate of Potassium, two to ten grains every two hours.

Hysteria.—Tincture of Aconite, one to three drops every hour for fluttering of the heart. Assafatida, one to five grains in eapsules every two hours. Bromide of Potassium, ten to thirty grains every hour to prevent paraxysms. Phosphorus, the one-hundredth to the one-fiftieth of a grain three times a day. Valerianate of Zine, one to three grains every two hours.

Impotency.—Tincture of Cantharides, two to five drops every three hours, taken with mueilage, or a teaspoonful of the Elixir of Iron, Quinia and Strychnia, every six hours. Strychnia, the one-sixtieth to the one-twentieth of a grain three times a day.

Incontinence of Urine. - Tincture of Cantharides, one to three

- drops three or four times a day, in mucilage. *Chlora*, one to three grains every three hours to children. *Ergot*, ten to thirty minims is recommended.
- Iteh.—Iodide of Potassium Ointment, applied three times a day.

 Sulphur Ointment, may also be used three times a day, or (F. 54.)
- Lactation. Excessive.—Alcohol, such as Beer or Ale, sometimes useful. Tineture of Belladonna, internally, one to tendrops every three to six hours, or the Ointment, applied to the mammae. Quinine, one to three grains every three hours is also beneficial.
- Laryngismus Stridulus—Croup—Bromide of Potassium, two to ten grains every two hours, especially when attended with eonvulsions. Cod-liver Oil. Cold Sponging, several times a day will prevent convulsions. Cold Water, dashed on the face, will often arrest the paraxysm. Lancing the Gums, if they are swollen, red and hot, is useful. Spinal Ice-bag, is sometimes beneficial.
- Lice—Pedieula.—Essential Oils, such as Rosemary, Cajuput and Peppermint, will kill head lice. Staphisagria Ointment or Powder, will also destroy the body louse, or an Infusion of Larkspur will destroy both kinds. Oleate of Mercury, is one of the best remedies, but has to be used with great care.
- Lumbago.—Tincture of Cimicifuga, ten to forty drops every two hours. Ether Spray, apply locally, to deaden the pain. Galvanic Shocks, are also very highly recommended. A Hot Flat-iron passed over the parts, first covering the skin. Nitrate of Potassium, ten grains every one or two hours, when urine is seauty or light-colored. Turpentine, twenty drops every three to six hours.
- Lupus—A Wolf—A Malignant Ulcer.—Tincture of Iodine applied to the edges and around the afflicted parts. Nitrate of Silver, ten grains to an ounce of Water, used locally, and gradually increasing its strength. Chloride or Nitrate of Zinc, weak solutions, applied locally.
- Mularia.—Cinchonia, two to five grains every two hours. Cinchonidia, two to five grains every two hours. Quinine, two to five grains, Arsenic and Strychnia, of each the one-fortieth to the one-twentieth of a grain every six hours.
- Mania, Acute.—Tincture of Cimicifuga, five to twenty drops every two hours during pregnancy or after confinement. Bromide of Potassium, five to twenty grains every two hours until quiet. Morphia, one-eighth to one-fourth grain hypodermically, to induce sleep.

- Measles.—Tincture of Acouite, one drop every hour. Carbonate of Animonia, two to five grains with Syrup of Acacia, every two to four hours. Mustard Bath, for the sudden disappearance of the rash.
- Melancholy—Blues.—Bromide of Potassium, five to twenty grains every two hours. Morphia, one-eighth to one-fourth of a grain hypodermically. Musk, one to five grains every two hours, or Castoreum in the same doses. Bromide of Potassium, ten to thirty grains on going to bed. Tineture of Opium, one drop and two of Nux Vomica several times a day, for headache, with dyspepsia. Phosphorus, one-hundredth to one-fiftieth of a grain every six hours, in depression from overwork.
- Micturation—Passing Water—Frequent.—Tineture of Cantharides, one to three drops every two hours, taken with mucilage.

 Opium, one grain every three hours.
- Micturation, Painful.—Alkalies, such as the Citrate or Bicarbonate of Potassium, two to five grains every two hours, when caused by passing crystals of uric acid. Camphor, one to five grains every two hours. Tineture of Cantharides, one to five drops every six hours for frequent micturation with pain.
- Mouth, Diseases of.—Chlorate of Potassium, a saturated solution for ulceration of the mouth or tongue, to be used several times a day, as a wash. Lime Water, in inflammation and ulceration of the mouth, is also useful. Nitrate of Silver, applied to the ulcers of the mouth. Sulphate of Copper, applied to the sores on the tongue.
- Muscles, Aching of, from Exertion.—Tincture of Cimicifuga, ten to thirty drops very two hours, if very painful. Wet Sheet Pack, then rub thoroughly with a Turkish towel. Turkish Baths, are also very useful.
- Nevus--Mothers' Mark.—Chloride, Iodide or Nitrate of Zinc, in weak solution, applied locally.
- Neuralgia.—Aconite Liniment or Ointment, applied every three hours, if in the face, but care must be used not to get any into the eyes. Belladonua Liniment or Ointment, applied every three hours. Bromide of Potassium, five to twenty grains every three hours. Capsieum Plaster. Chamomile Flowers, for hot fomentations, or Hops. Chloral and Camphor, equal parts, rubbed together until in a liquid state; apply over the painful part with a brush every three hours. Tineture of Gelseminum, two to ten drops every two hours in neuralgia of the dental nerve, or the face. Japanese Oil of Peppermint, often applied over the painful part.

- Quinine, three to ten grains every two or three hours in periodical neuralgia. Veratria, twenty grains to an ounce of Ointment for facial neuralgia, but for sciatica and other neuralgia increase the strength.
- Notus-Exostosis—A Lump on a Bone.—Iodide of Potassium, twoto ten grains internally every three to six hours, and the Ointment applied externally every three to six hours.
- Nose, Diseases of.—Glycerite of Tunnin, to be applied with a camel's hair brush to the nostrils for sorcness or cruptions, also for the discharge of greenish black mucus. (F. 8) applied with a brush or powder-blower every three hours, is good.
- Nutrition, Impaired.—Cod-liver Oil, very useful for ehildren. Lime Water, in frequently repeated small doses. Tineture of Iron, ten drops after meals, in water.
- Nymphomania. Bromide of Potassium, ten to thirty grains every six hours. Camphor, one to five grains every six hours.
- Obesity.—Spinal Ice-bag, along the spine. Alkalies, as the Bicarbonate of Potassium, two to ten grains every two hours. Liquor Potassa, one to ten drops in water every two hours. Vinegar, a remedy which can not be too strongly condemned, as it reduces only at the expense of the health. Fluid Extract of Fucus Vesiculosis, a teaspoonful every three hours.
- Ophthalmia.—Alum, ten grains to an ounce of water and applied with a brush frequently. Very useful in purulent ophthalmia of children. Cod-liver Oil, to strumous persons. Sulphate of Copper and Sulphate of Zinc each one grain, Water, one ounce; drop in the eyes every three hours.
- Ozena.—Alum, one drachm to the pint of Water, and use with a nasal douche. Carbolic Acid, as a weak solution, with the nasal douche. Glycerite of Tannin, to be applied with a camel's hair brush up the nostrils. Red or White Precipitate, one grain to a drachm of Sugar; triturate thoroughly and use as a snuff in the non-syphilitic form, after clearing the nose. Nitrate of Mercury Ointment, one drachm to the ounce of Cosmoline, use with a brush, in the syphilitic form Tannic Acid, one drachm to eight ounces of Water, use with the nasal douche.
- Paronychia. Mercurial Ointment, must be applied and allowed to remain for fifteen minutes, then remove and Poultice for an hour, and then repeat. Nitrate of Lead, in fine powder, dusted on the sore night and morning.

- Peritonitis.—Opium, one to two grains every two hours, to quiet intestinal movements. Turpentine Stupes, followed by Poultices, as hot as can be borne, applied over the abdomen and renew frequently, and cover with cotton or oiled silk. Tincture of Aconite, one to three drops every hour, for fever.
- Perspiration.—Atropia, (F. 35) in sweating from phthisis and exhausting diseases. Quinia, in sweating from phthisis, three to ten grains every hour or two hours, or use the Bi-sulphate of Quinia in solution. Spinal Ice-bag, is also beneficial in some eases. Sponging, with Water as het as can be borne, for sweating in phthisis. Sponging with Water containing a small amount of Muriatic, Sulphuric or Nitvo-Muriatic Acid. Oxide of Zinc, two grains every night, to control profuse sweating. Aromatic Sulphuric Acid, ten drops in water every six hours for night sweats.
- Piles.—Bromide of Potassium, in fine powder, one part, Glyccrine four parts, mix thoroughly and apply locally to relieve pain. Cold injection of Water, in the morning before going to stool. Compound Licorice Powder, in teaspoonful doses, is a good laxative if troubled with piles. Gallic Acid, one drachm to an ounce of lard; mix well and apply locally to the parts. Fluid Extract of Hamamelis, ten to sixty drops every two hours, and use as an injection diluted with water. Useful in all kinds of piles. Sulphur, five to ten grains with a drachm of Confection of Senna, before breakfast, as a laxative.
- Pityriasis.—Borax, a saturated solution applied locally several times a day. Glycerite of Borax, in solution for pityriasis of the scalp. Citrine Ointment, together with Cosmoline, is very useful in pityriasis of the hairy parts of the face. Sulphurous Acid, four ounces added to a warm bath, together with Glycerine.
- Pleurisy.—Tincture of Aconite, four to five drops every hour when feverish. Blisters, either large or small, after the inflammation or fever has gone down. The sores, if any result, should be healed at once. Poultices, applied as hot as ean be borne and renewed frequently. Mustard Plasters, applied are very useful. Tincture of Veratrum Viride, one or two drops every two hours. Opium, one grain every hour until relieved of the pain. Morphine, one-eighth to one-fourth grain and repeated every hour until relieved.
- Pleurodynia.—Tincture of Cimicifuga, ten to forty drops every two hours, when due to uterine disorders. Belladonna Liniment, applied every two hours, or apply a Belladonna Plaster, large

enough to eover the painful part. Blistering, either use the Aectic Cantharidal Vesicant or a Fly Blister. Ether, used as a spray, is very useful to remove the pain. Opium Liniment, applied every two hours until relieved. Morphia, one-eighth to one-fourth grain, by hypodermic injection. Poultices, applied as hot as can be borne, and covered with oiled silk or oiled muslin.

- Preumonia.—Tincture of Aconite, one or two drops every hour.

 Blisters, will sometimes lessen the pain, but care should be used.

 Morphia, one-eighth to one-fourth of a grain, by hypodermic injection, for severe pain. Poultiees, as hot as ean be borne and large enough to cover the entire breast in children. Quinine, two to five grains every two hours to reduce temperature. Tartar Emetic, one-twentieth to one-tenth of a grain every two hours, when skin is hot and dry. Mustard Plasters, applied to the chest. Tincture of Veratrum Viride, one to five drops every two hours.
- Poisoning Generally.—Sulphate of Zine, ten to sixty grains, dissolved in tepid water and repeated every fifteen minutes till free vomiting occurs. Ipecae, give ten to twenty grains, or Mustard and Warm Water frequently repeated. Olive Oil or Castor Oil, in large doses, for poisoning by Creasote or Carbolic Acid. Brandy and Whisky, in poisoning by Aconite, Digitalis, Lobelia, etc.
- Poisoning by Any of the Acids.—Alkalies, such as the Bicarbonates of Potash, or Soda, ten to twenty grains. Magnesia Calcined, a tablespoonful, in water, every half hour or hour. Milk, given in large quantities, or the white of an egg.
- Poisoning by Alcohol.—Ammonia Water, held to the nostrils and inhaled. Cold douche, poured for some time on the head. Cold Water, dashed with some violence on the face.
- Poisoning by Alkalies.—Acids, diluted, any one may be used, or give Vinegar.
- Poisoning by Antimony.—Prepared Chalk, with Milk, or any demuleent drinks given at once. Magnesia, Oxide or Carbonate may also be given. Tannie Acid, may also be given, or give strong Tea or Coffee.
- Poisoning by Arsenic.—Hydrated Sesqui-Oxide of Iron, given in tablespoonful doses, or if not at hand give Dialyzed Iron, with some water. Lime-water, in frequently repeated doses. Magnesia Curbonate and Oxide, in large doses may be given, with a little water. Charcoal, given in a tablespoonful of Milk.

- Poisoning by Belladonna.—Magnesia, Carbonate or Oxide, in large doses with water. Very reliable if poisoned with any of the belladonna alkaloids. Ammonia Water, held to the nostrils and inhaled. Charcoal, a tablespoonful frequently repeated. Physostigma has also been recommended in small doses. Morphia, one-fourth to one-half grain by hypodermic injection every hour.
- Poisoning by Chloral.—Coffee, strong, in large quantities. Galvanism, in shocks, is one of the best remedies. Friction, applied vigorously, and keep the patient awake if possible. Hot eloths applied to the spine, heart and extremities. Alcohol, in small doses, is very useful.
- Poisoning by Lead.—Bi-Carb. of Potassium or Magnesia, for poisoning by the soluble salts of lead. Iodide of Potassium, one to five grains, in chronic lead poisoning. Milk, beaten together with the Whites of Eggs, and given in large doses. Stomach Pump, the best remedy in acute poisoning by the lead salts. Sulphur Baths, in chronic lead poisoning, is one of the best remedies. Epsom Salts dissolved in water.
- Poisoning by Mercury.—White of Eggs, in any form of poisoning by mercury, especially corrosive sublimate. Charcoal, in tablespoonful doses, frequently repeated. Sulphur Baths are also useful.
- Poisoning by Nitrate of Silver.—Salt in Solution, given in frequently repeated doses.
- Poisoning by Opium or Morphine.—Ammonia Water, held to the nostrils and inhaled. Atropia, hypodermically, one-eighth to one-half grain. Bromide of Potassium, five to twenty grains every hour. Strong Coffee, in large quantities, and keep patient awake by walking. Cold Water, allowed to run over the body or dashed into the face. Stomach Pump, the best remedy, and keep the patient moving until your physician is called in.
- Poisoning by Oxalic Acid.—Lime-water, given freely.

 Calcined Magnesia, in large doses, mixed with Water or Milk.
- Poisoning by Phosphorus.—Carbonate of Magnesia, in large doses, with Water. Turpentine, ten to sixty drops with Water, every hour. Mustard and Warm Water at once.
- Poisoning by Strychnia.—Atropia, hypodermically, onetwentieth to one-tenth of a grain every hour or two. Chloral, five to twenty grains every half hour or hour. Chloroform, by inhalation, in small quantities. Nitrate of Amyl, by inhalation,

dropping five drops on a handkerchief, but it must be used with caution, as it is a powerful poison. Bromide of Potassium, in large doses as twenty to eighty grains, and repeated. Stomach Pump, use as quick as possible.

- Pruritus—An intense itching without any eruption.—Alum, saturated solution, applied locally, in pruritus of the vulva. Boracic Acid, one drachm to half pint of Hot Water, and apply locally. Cyanide of Potassium, half drachm to a pint of Water, and apply in urticaria, eczema and pruritus, when skin is unbroken. Mercurial Ointment or solutions of the Mercurial Salts used as washes.
- Psoriasis.—Fowler's Solution of Arsenic, five drops after meals, in Water. Tineture of Cantharides, one to five drops every three hours in mucilage. Sulphur, internally, also use the Sulphur Soap in washing the parts. Warm Baths in the acute stages.
- Puerperal Fever.—Bromide of Potassium, five to twenty grains, every two hours, for restlessness. Chloral, five to ten grains every two hours, for convulsions or mania. Morphia, one-eighth to one-fourth of a grain hypodermically, for convulsions.
- Rheumatism.—Steam Bath and Vinegar, relieves pain and checks perspiration. Aconite Liniment, applied locally every two hours. Tineture of Cimicifuga, ten to forty drops every two hours, in acute and chronic cases. Iodide of Potassium, two to three grains every three hours. Nitrate of Potassium, ten to twenty grains every two hours with Lemonade. Morphia, one-eighth to one-fourth of a grain, will relieve pain. Quinine, three to five grains every two hours, or (F. 12). Salicylic Acid, ten grains every two hours. Salicylate of Soda, ten to twenty grains every two hours. Turkish Baths, in acute and chronic cases.
- Salivation.—Aeids, such as Tannic in solution, and used as a gargle. Chlorate of Potash, saturated solution, and used as a gargle often. Borax, in solution, has often been used with success. Tineture of Iodine, thirty or forty drops in a glass of Water, and use as a gargle. Turpentine may be used by touching the ulcers with it, or use a gargle containing some Emulsion of Turpentine.
- Scarlet Fever.—Tincture of Aconite, one or two drops every hour, when feverish. Tincture of Belladonna, one to five drops every two hours, is said to be a preventive. Cold Affusions should be used at the beginning, if the skin is hot and dry. Cold, Wet Cloths, applied to the throat, and removed several times a day. Mustard Bath, to bring out the rash. Saliculate of Soda, one to

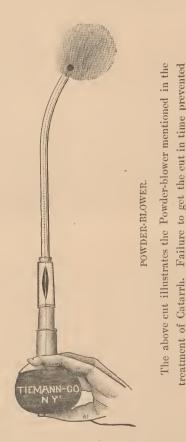
- five grains every two hours, to lessen fever. Sulphate of Magnesia, and other purgatives, will often prevent sore throat.
- Sciutica.—Aconite Liniment, applied every two hours. Belladonna Ointment is also highly spoken of. Tincture of Cimicifuga, ten to forty drops every two hours. Morphia, one-eighth to one-fourth grain, is very useful. Sulphur Soap or Ointment may be used locally. Turpentine, given for a week, in teaspoonful doses on retiring, is also recommended.
- Scurvy.—Alcohol, diluted and used as a gargle. Lemon Juice, used as a lotion, is one of the very best remedies. (F. 20) applied dry is an excellent remedy.
- Sea Sickness.—Nitrate of Amyl, five drops on a handkerehief and inhaled; use with great eare. Chloroform, give several drops in a little port wine. Ipecae, one-fourth grain in a glass of cold water, a teaspoonful every ten minutes.
- Sexual Desire, Excessive.—Camphor, give from fifty to sixty grains during the day.
- Sick Headache.—Elixir of Bromide of Potassium, a dessertspoonful every one or two hours until relieved. Elixir of Guarana, a dessertspoonful every one or two hours or (F. 22).
- Steeplessness.—Bromide of Potassium, ten to forty grains on going to bed, and repeat in a few hours if not resting. Beer, several glasses taken on going to bed. Warm bath or sponging is very good.
- **Somnambulism.**—Bromide of Potassium, one to five grains every two hours for children.
- Sores and Ulcers.—Carbolic Acid, a weak solution, one part to thirty of water, and used several times a day. Canstic Soda or Potash, may also be used by touching the hard edges. Charcoal, very useful in sloughing, with feetid smell. Iodoform, may be dusted over the sores, or an ointment thereof used. Nitric Acid, used as a caustic to sloughing sores. Tannin, in solution, or mix with glycerine and applied. Yeast and charcoal, together very useful in all sloughing sores.
- Spermatorrhea.—Bladder, to be emptied before retiring. Bromide of Potassium, five to ten grains every two hours, the snspension of the testes in cold water, and always give the patient a hard mattress to sleep upon. Hypophosphites of Lime and Soda, (F. 47.) Phosphorus, one-hundredth to one-fiftieth of a grain

after each meal. Quit the practice, and never begin again. Strychnia, one-sixtieth to one-thirtieth of a grain after meals.

- **Spinal Irritation.**—Aconite Liniment, may be used every two or three hours. Belladonna Ointment, is also very good and may be used every three hours.
- Sprain.—Cold applications, are good; warm are often the best for a sprain of the ankle.
- Suspended Animation at Birth.—The sprinkling of cold water in the child's face very good, or gently slapping the buttoeks.
- Syphilis.— Cod-Liver Oil, in tablespoonful doses after meals. Syrup Iodide of Iron, ten to thirty drops in water after meals. Especially good when patient is bloodless and debilitated. Corrosive Sublimate, one-twentieth to one-tenth of a grain every six hours. Iodide of Potassium, in secondary or tertiary syphilis (F. 44.)
- Tape Worm.—Kameela, from sixty to one hundred and twenty grains, and repeat in three hours. Ethereal Oil of Male Ferm two to ten drops—according to age—in capsules, on an empty stomach. The best plan is to take a eathartic at night, fasting, and take the remedy in the morning, and fast until noon. Fluid Extract of Pumpkin Seed, is considered by many as a specific to remove tape worm. Give one to four teaspoonfuls every two or three hours, till four doses are taken, then give a cathartic of Castor Oil and Turpentine. Fluid Extract of Arcca, one-half to three teaspoonfuls.
- Tinea Circinatus—Ringworm.—Citrine Ointment, mixed with Cosmoline, very good. Tur, and Mercurial Ointments are also good.
- Vomiting.—Aromatic Spirits of Ammonia, ten to thirty drops in a little cold water every fifteen minutes. Subnitrate of Bismuth, one to ten grains may be given. Calonel, a fourth to one grain every three hours. Carbolic Acid, in very small doses; one-fourth to one-half drop, or put ten drops in a glass of cold water, stir well and give a teaspoonful every ten minutes. Creasote, one-half to two drops every fifteen minutes, in water. Cinnamon or Peppermint Water, a teaspoonful every ten minutes. Ipecae, one-third of a grain in a glass of ice water, a teaspoonful every ten minutes. Oxalate of Cerium, one-half to one grain every hour. Tineture of Cardamom, one teaspoonful every half hour. Spirits Chloroform, ten to fifteen drops every half hour.

Warts.—Chromic Acid, applied once a day. Lunar Caustic, apply once a day. Zine Chloride, may also be used in the same way.

Whooping Cough.—Quinine, from one sixth to two grains every two hours. Bromide of Potassium, one to ten grains every two or three hours. Tineture of Lobelia, ten to twenty drops every one to three hours. Castor Oil. Cod-liver Oil.



its being placed where it properly belonged

DIETARY FOR THE SICK AND CONVALESCENT.

BEEF TEA.

A quick way to make beef tea; take one pound of loin steak, chop fine and put into a quart tin cup, pour over it one pint of warm water and place in a pot of boiling water; boil for one or two hours, and give from a teaspoonful to a teacupful according to the strength of the patient. Always get juicy, tender beef when possible, and never salt but very little. For young children, do not use any salt.

BEEF ESSENCE.

Take one pound of round steak or loin, free from fat, chop fine and put in an earthen jar, seal the lid down with paste and roast in the oven for four hours, strain through a sieve and give two or three teaspoonfuls every one to three hours. If the patient is very low, add as much boiling water as you have essence. Keep warm and well covered. The beef may be put in an ale bottle, well stoppered and placed in a pot of cold water and boiled for four or five hours. Use but little salt, and if the patient is not too low, let him salt to his taste.

A GOOD DRINK IN FEVER.

Five ounces of raisins, three of prunes, two of currants, well washed, and one ounce of citron; boil together in four quarts of water, very slowly, to one quart, before removing from the stove, add half an ounce of lemon peel. When quite cool, strain to remove the sediment; add sugar to the taste. When cool, give as a drink to a patient with fever.

WINE WHEY.

To half a pint of boiling milk add a wineglassful of Catawba or Madeira wine. Let it cool. Separate the curd by straining through muslin. Sweeten the whey to taste and grate upon it a little nutmeg.

MILK PUNCH.

To a tumblerful of sweet milk, add half a wineglassful of French brandy, whisky or Jamaica rum. Sweeten and grate on it some nutmeg.

TO MULL SOUR WINE.

To every pint of sour wine use half a pint of water, one table-spoonful of allspice, and one teaspoonful of cloves. Boil for a few minutes, beat the yelks of two eggs with two spoonfuls of white sugar and a teaspoonful of cinnamon. Boil all together for five minutes.

EGG-NOGG.

Take the yelk of one egg to one pint of fresh sweet milk, beat them well together, then add gradually whilst beating, from three to six ounces of pure whisky. Sweeten to taste. From one teaspoonful to one tablespoonful every one or two hours.

EGG BRANDY.

Beat four eggs to a foam in five ounces of water, add three tablespoonfuls of white sugar, pour in five ounces of brandy, stirring constantly. Give a small amount at a time.

MUTTON BROTH.

To one pound of lean mutton, use one quart of water. Boil two hours. When nearly done, add a few bread crusts, and a little salt. Be careful to skim off the fat.

ARROWROOT BLANC MANGE.

To one teacupful of genuine arrowroot add a pint of new milk; first boil the milk with twelve sweet almonds, well mashed. Strain and sweeten with sugar; place the arrowroot in a saucepan, then pour the milk upon it boiling hot, stirring all the time; turn into a vessel to cool.

MILK PORRIDGE.

Take four tablespoonfuls of oat meal, stir in a quart of sweet milk till smooth; have one quart of boiling water ready; pour in the oat meal and milk, stirring very quick. Let it boil until thick. Sweeten with white sugar.

BARLEY SOUP.

Take a small shank soup bone and place in two quarts of water, boil two hours, add three ounces of pearl barley, one sliced potato, one tomato and one onion, if wished. Boil another hour, cool and strain. When wanted for use warm up.

CHICKEN PANADA.

Take a full-grown young chicken, boil in two quarts of water; when tender enough remove the skin. When cool cut the breast

into very small bits, place it in a wooden vessel, take a potato masher and mash it into a pulpy paste, at the same time adding a little of the broth in which it was cooked; season with salt and boil until thick as gruel. Rice or barley well cooked may be added. This can be set by and used when desired.

OATMEAL PUDDING.

Take one pint of the best oatmeal, pour over it one quart of boiling milk, let it soak over night, put into a basin large enough to hold it, add two eggs well beaten and a pinch of salt; cover tight with a cloth well floured, and boil an hour and a half. It may be eaten while hot with a little butter, or with eream and sugar, or sliced and toasted.

IRISH MOSS.

Irish moss one and a half ounces, soak for twenty minutes in cold water, wash out and wash in second water to remove bitter taste. Put in one pint of milk and boil for fifteen or twenty minutes. Pour into a deep dish and let cool. Serve cold with milk or cream and sugar.

FLOUR CAUDLE.

Take two tablespoonfuls of flour, sieve it smoothly into one-half pint of cold water. Mix well to prevent lumps. Place one quart of sweet milk in a stew-pan, over the fire; when it boils, stir in quickly the flour preparation. Add sugar to suit the taste, and stir a few minutes longer.

RICE WITH FRUIT.

To one pint of sweet milk add two tablespoonfuls of rice, well washed. Pare, eore and quarter two tart apples, and add to it raisins; eurrants can be used if preferred. Let it simmer until the rice is soft. Be careful not to stir it or cook too fast. When done add one egg, well beaten, to bind it. Serve with cream and sugar.









WBA C973L 1882

63560970R

NLM 05164355 0

NATIONAL LIBRARY OF MEDICINE